DOCUMENT RESUME

ED 129 023 EC 091 229

TITLE	Down's Syndrome. A Selective Bibliography. Exceptional Child Bibliography Series No. 604.
INSTITUTION	Council for Exceptional Children, Reston, Va. Information Services and Publications.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	76
NOTE	23p.; For related document, see ED 105 698
AVAILABLE FROM	CEC Information Services and Publications, The Council for Exceptional Children, 1920 Association Drive, Reston, Virginia 22091 ($4.00)
EDRS PRICE	MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS	*Abstracts; *Annotated Bibliographies; Elementary Secondary Education; Exceptional Child Education; Exceptional Child Research; Mentally Handicapped; *Mongolism

ABSTRACT

The annotated bibliography on Down's Syndrome contains approximately 100 abstracts and associated indexing information for documents or journal articles published from 1966 to 1975 and selected from the computer files of the Council for Exceptional Children's Information Services and the Education Resources Information Center (ERIC). It is explained that titles were chosen in response to user requests and analysis of current trends in the field. Abstracts include bibliographic data (identification or order number, publication date, author, title, source or publisher, and availability); descriptors indicating the subject matter covered; and a summary of the document's contents. Also provided are instructions for using the bibliography, a list of journals from which articles were abstracted, and an order form for ordering microfiche or paper copies of the documents through the ERIC Document Reproduction Service. (JM)

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Down's Syndrome

A Selective Bibliography

CEC Information Services and Publications
An ERIC Clearinghouse
The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

Exceptional Child Bibliography Series No. 604

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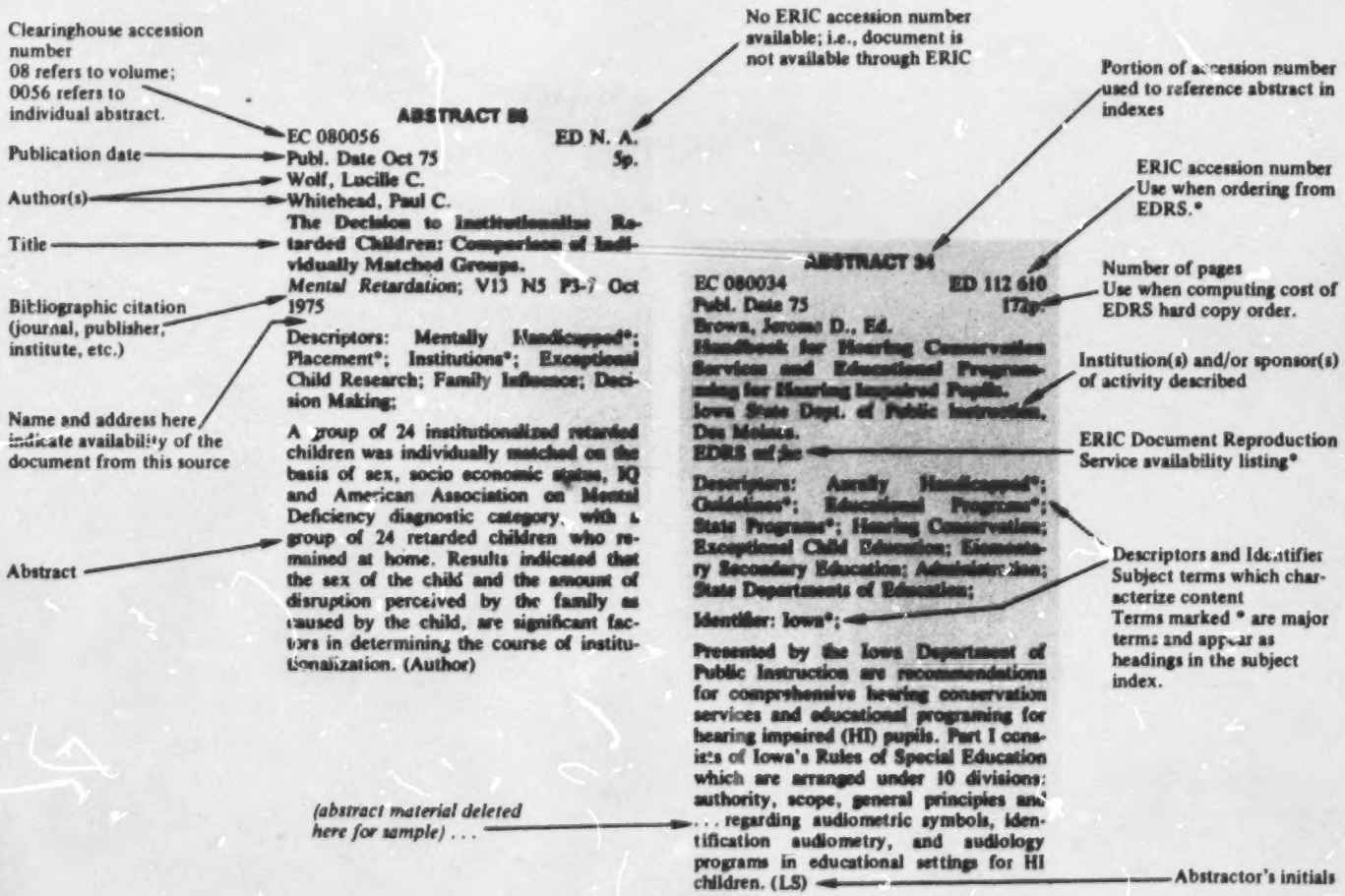
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ABSTRACT 88
EC 080056
ED N. A.
5p.
Publication date
Publ. Date Oct 75
Author(s)
Wolf, Lucille C.
Whitehead, Paul C.
Title
The Decision to Institutionalize Retarded Children: Comparison of Individually Matched Groups.
Mental Retardation; V13 N5 P3-7 Oct 1975
Bibliographic citation (journal, publisher, institute, etc.)
Descriptors: Mentally Handicapped*; Placement*; Institutions*; Exceptional Child Research; Family Influence; Decision Making;
Name and address here indicate availability of the document from this source
A group of 24 institutionalized retarded children was individually matched on the basis of sex, socio economic status, IQ and American Association on Mental Deficiency diagnostic category, with a group of 24 retarded children who remained at home. Results indicated that the sex of the child and the amount of disruption perceived by the family as caused by the child, are significant factors in determining the course of institutionalization. (Author)
Abstract
ERIC accession number
Use when ordering from EDRS.*
ABSTRACT 34
EC 080034
ED 112 610
Publ. Date 75
172p.
Number of pages
Use when computing cost of EDRS hard copy order.
Brown, Jerome D., Ed.
Handbook for Hearing Conservation Services and Educational Programming for Hearing Impaired Pupils.
Institution(s) and/or sponsor(s) of activity described
Iowa State Dept. of Public Instruction, Des Moines.
EDRS mf/hc
ERIC Document Reproduction Service availability listing*
Descriptors: Aurally Handicapped*; Guidelines*; Educational Programs*; State Programs*; Hearing Conservation; Exceptional Child Education; Elementary Secondary Education; Administration; State Departments of Education;
Descriptors and Identifiers
Subject terms which characterize content
Terms marked * are major terms and appear as headings in the subject index.
Identifier: Iowa*;
Presented by the Iowa Department of Public Instruction are recommendations for comprehensive hearing conservation services and educational programing for hearing impaired (HI) pupils. Part I consists of Iowa's Rules of Special Education which are arranged under 10 divisions; authority, scope, general principles and
(abstract material deleted here for sample) . . .
. . . regarding audiometric symbols, identification audiometry, and audiology programs in educational settings for HI children. (LS)
Abstractor's initials

CEC Information Center Journal Collection

The CEC Information Center regularly receives more than 200 journals which are examined for material concerning exceptional children. Articles judged to meet established criteria are abstracted, indexed and published in *Exceptional Child Education Abstracts (ECEA)*. Some of these articles are indexed and submitted also for announcement in *Current Index to Journals in Education (CIJE)*, an Educational Resources Information Center (ERIC) publication. The following list (current May 1976) is *representative* of journals currently received.

*Academic Therapy, 1539 Fourth Street, San Rafael, California 94901

ACTA Symbolica, University of Akron, Akron, Ohio 44304

Adolescence, PO Box 165, 391 Willets Road, Roslyn Heights, New York 11577

*American Annals of the Deaf, 5034 Wisconsin Avenue NW, Washington DC 20016

American Education, 400 Maryland Avenue SW, Washington DC 20202

American Educational Research Journal, 1126 16th Street NW, Washington DC 20036

American Journal of Art Therapy, 6010 Broad Branch Road, Washington DC 20015

American Foundation for the Blind Research Bulletin, 15 West 16th Street, New York, New York 10011

**American Journal of Diseases of Children, 535 North Dearborn Street, Chicago, Illinois 60610

*American Journal of Mental Deficiency, 49 Sheridan Avenue, Albany, New York 12210

American Journal of Nursing, 10 Columbus Circle, New York, New York 10019

**American Journal of Occupational Therapy, 6000 Executive Boulevard, Suite 200, Rockville, Maryland 20852

*American Journal of Orthopsychiatry, 1790 Broadway, New York, New York 10019

Archives of Otolaryngology, 535 North Dearborn Street, Chicago, Illinois 60610.

Arithmetic Teacher, 1201 16th Street NW, Washington DC 20036

ASHA, 9030 Old Georgetown Road, Washington DC 20014

Audecibel, 24261 Grand River Avenue, Detroit, Michigan 48219

Auditory & Hearing Education, 15300 Ventura Boulevard, Suite 301, Sherman Oaks, California 91403

Audiovisual Instruction, 1201 16th Street NW, Washington, DC 20036

Australian Children Limited, Box 91, Brighton 5048, South Australia

*Australian Journal of Mental Retardation, P.O. Box 255, Carlton, South Victoria 3053, Australia

AVISO, Newark State College, Union, New Jersey 07083

**Behavior Therapy, 111 Fifth Avenue, New York, New York 10003

Behavior Today, Ziff-Davis Publishing Co., 1156 15th Street NW, Washington DC 20036

Behavioral Disorders, Council for Children with Behavior Disorders, Indiana University, Bloomington, Indiana 47401

British Journal of Disorders of Communication, 4345 Annandale Street, Edinburgh EH7 4 AT, Scotland

British Journal of Mental Subnormality, Monyhull Hospital, Birmingham B30 3QB, England

British Journal of Physical Education, Ling House, 10 Nottingham Place, London WIM 4 AX, England

Bulletin of the Orton Society, 8415 Bellona Lane, Suite 204, Towson, Maryland 20402

Bulletin of Prosthetics Research, US Government Printing Office, Washington DC 20402

*Bureau Memorandum, 126 Langdon Street, Madison, Wisconsin 53702

CSMR Bulletin, 345 Campus Towers, Edmonton, Alberta, Canada

Canada's Mental Health, Information Canada, Ottawa K1A 0S9, Canada

CEDR Quarterly, Phi Delta Kappa, PO Box 789, Bloomington, Indiana 47401

Child Care Quarterly, 2852 Broadway, Morningside Heights, New York 10025

Child Development, 5750 Ellis Avenue, Chicago, Illinois 60637

**Child Psychiatry & Human Development, 2852 Broadway, Morningside Heights, New York 10025

Child Welfare, 67 Irving Place, New York, New York 10003

Childhood Education, 3615 Wisconsin Avenue NW, Washington DC 20016

Children Today, US Government Printing Office, Washington DC 20402

Children's House, Box 111, Caldwell, New Jersey 07006

Colorado Journal of Educational Research, University of Northern Colorado, Greeley, Colorado 80631

Communication Education (formerly Speech Teacher) Speech Communication Association, Statler Hilton Hotel, New York, New York 10001

Compact, 300 Lincoln Tower, 1860 Lincoln Street, Denver, Colorado 80203

Day Care & Early Education, 2852 Broadway, New York, New York 10025

Deaf American, 5125 Radnor Road, Indianapolis, Indiana 46226

Deficience Mentale/Mental Retardation, York University, 4700 Keele Street, Downsview, Ontario M3J 1P3, Canada

Developmental Medicine and Child Neurology, Spastic International Medical Publications, 20-22 Mortimer Street, London W1N 7RD, England

Devereux Forum, 19 South Waterloo Road, Devon, Pennsylvania 19333

DSH Abstracts, Gallaudet College, Washington, DC 20002

Dyslexia Review, The Dyslexia Institute, 133 Gresham Road, Staines, TW18 2AJ, England

*Education and Training of the Mentally Retarded, 1920 Association Drive, Reston, Virginia 22091

Education Digest, PO Box 623, 416 Longshore Drive, Ann Arbor, Michigan 48107

*Education of the Visually Handicapped, 919 Walnut St. Fourth Floor, Philadelphia, Pennsylvania 19107

Educational & Psychological Measurement, Box 6907, College Station, Durham, North Carolina 27708

Educational Forum, 343 Armory Building, University of Illinois, Champaign, Illinois 61820

Educational Horizons, 2000 East 8th Street, Bloomington, Indiana 47401

Educational Leadership, 1201 16th Street NW, Washington DC 20036

Educational Researcher, 1126 16th Street NW, Washington DC 20036

Educational Technology, 140 Sylvan Avenue, Englewood Cliffs, New Jersey 07632

Elementary School Journal, 5801 Ellis Avenue, Chicago, Illinois 60637

English Journal, 1111 Kenyon Road, Urbana, Illinois 61801

*Exceptional Children, 1920 Association Drive, Reston, Virginia 22091

*Exceptional Parent, 264 Beacon Street, Boston, Massachusetts 02116

Family Involvement, Canadian Education Programs, 41 Madison Avenue, Toronto, Ontario M5R 2S2, Canada

Focus on Exceptional Children, 6635 East Villanova Place, Denver, Colorado 80222

*Gifted Child Quarterly, 8080 Springvalley Drive, Cincinnati, Ohio 45236

Harvard Educational Review, 23 South Main Street, Uxbridge, Massachusetts 02138

Hearing, 105 Gower Street, London WCIE 6AH, England

*Hearing & Speech Action, 814 Thayer Avenue, Silver Spring, Maryland 20910

Hearing Rehabilitation Quarterly, New York League for the Hard of Hearing, 71 W. 23rd Street, New York, New York 10010

Human Behavior, PO Box 2810, Boulder, Colorado 80302

Humanist, 923 Kensington Ave., Buffalo, New York 14215

Illinois Schools Journal, 6800 South Stewart Avenue, Chicago, Illinois 60621

Indiana Speech & Hearing Journal, Ball State University, Muncie, Indiana 47306

Instructor, PO Box 6099, Duluth, Minnesota 55806

Inter-Clinic Information Bulletin, 317 East 34th Street, New York, New York 10016

International Child Welfare Review, 1 Rue De Varembe, 1211 Geneva 20, Switzerland

International Journal of Child Psychiatry, Verlag 10, Basel 13, Switzerland

International Rehabilitation Review, 219 East 44th Street, New York, New York 10017

Involvement, PO Box 460, Oak Ridges, Ontario, Canada

*denotes journals monitored for CIJE.

**denotes copyrighted journals for which ECEA has been granted permission to use author abstracts.

Journal for Special Educators of the Mentally Retarded, 171, Center Conway, New Hampshire 03813

*Journal of Abnormal Child Psychology, **Plenum Publishing Corp., 227 W. 17th Street, New York, New York 10011

**Journal of Abnormal Psychology, 1200 17th Street NW, Washington DC 20036

*Journal of Applied Behavior Analysis, Uni-**versity of Kansas, Lawrence, Kansas 66044

Journal of Applied Rehabilitation Counseling, 1522 K Street NW, Washington DC 20005

Journal of Association for Study of Perception, PO Box 744, De Kalb, Illinois 60115

*Journal of Autism & Childhood Schizophre-**nia, Plenum Publishing Corp., 227 W. 17th Street, New York, New York 10011

Journal of Child Psychology & Psychiatry, Pergamon Press, Elmsford, New York 10523

Journal of Clinical Child Psychology, 111 South Meramec Avenue, No. 208, St. Louis, Missouri 63105

Journal of Communication Disorders, American Elsevier Publishing Co., 52 Vanderbilt Avenue, New York, New York 10014

Journal of Community Health, Human Sciences Press, 72 Fifth Avenue, New York, New York 10014

**Journal of Consulting & Clinical Psychology, 1200 17th Street NW, Washington DC 20036

Journal of Creative Behavior, 1300 Elmwood Avenue, Buffalo, New York 14222

Journal of Developmental Disabilities, PO Box 8470, Gentilly Station, New Orleans, Louisiana 70182

Journal of Education, Department of Education, Halifax, Nova Scotia

**Journal of Educational Psychology, 1200 17th Street NW, Washington DC 20036

Journal of Educational Research, Box 1605, Madison, Wisconsin 53701

Journal of General Education, 215 Wagner Building, University Park, Pennsylvania 16802

*Journal of Learning Disabilities, 5 North **Wabash Avenue, Chicago, Illinois 60602

Journal of Marriage & the Family, 1219 University Avenue SE, Minneapolis, Minnesota 55414

*Journal of Mental Deficiency Research, 86 Newman Street, London WIP 4 AR, England

Journal of Music Therapy, Box 610, Lawrence, Kansas 66044

Journal of Negro Education, Howard University, Washington DC 20001

**Journal of Nervous & Mental Disease, 428 East Preston Street, Baltimore, Maryland 21201

*Journal of Pediatrics, 11830 Westline Industrial Drive, St. Louis, Missouri 63141

**Journal of Personality Assessment, 1070 East Angeleno Avenue, Burbank, California 91501

Journal of Reading, 6 Tyre Avenue, Newark, Delaware 19711

Journal of Rehabilitation, 1522 K Street NW, Washington DC 20005

Journal of Rehabilitation of the Deaf, 814 Thayer Avenue, Silver Spring, Maryland 20910

Journal of School Health, American School Health Association, Kent, Ohio 44240

**Journal of School Psychology, 51 Riverside Avenue, Westport, Connecticut 06880

*Journal of Special Education, Grune and **Stratton, 111 Fifth Avenue, New York, New York 10003

*Journal of Speech & Hearing Disorders, 9030 Old Georgetown Road, Washington, DC 20014

*Journal of Speech & Hearing Research, **9030 Old Georgetown Road, Washington DC 20014

Journal of Teacher Education, One Dupont Circle, Washington DC 20036

*Language Speech & Hearing Services in **Schools**, 9030 Old Georgetown Road, Washington DC 20014

Lantern, Perkins School for the Blind, Watertown, Massachusetts 02172

Learning, 530 University Avenue, Palo Alto, California 94301

Mathematics Teacher, 1906 Association Drive, Reston, Virginia 22091

*Mental Retardation, 5201 Connecticut Ave-**nue NW, Washington DC 20015

Merrill Palmer Quarterly, 71 East Ferry Avenue, Detroit, Michigan 48202

Momentum, 350, One Dupont Circle, Washington DC 20036

Music Educators Journal, 1902 Association Drive, Reston, Virginia 22091

NASSP Bulletin, 1904 Association Drive, Reston, Virginia 22091

National Elementary Principal, 1801 North Moore Street, Arlington, Virginia 22209

The New Beacon, 224 Great Portland Street, London WIN/AA, England

*New Outlook for the Blind, 15 West 16th Street, New York, New York 10011

Notre Dame Journal of Education, PO Box 686, Notre Dame, Indiana 46556

Nursing Outlook, 10 Columbus Circle, New York, New York 10019

Optometric Weekly, 5 North Wabash Avenue, Chicago, Illinois 60602

Parents Voice, Journal of the National Society of Mentally Handicapped Children, Pembridge Square, London W2 4EP, England

Peabody Journal of Education, George Peabody College for Teachers, Nashville, Tennessee 37203

*Pediatrics, PO Box 1034 Evanston, Illinois **60204

**Personnel & Guidance Journal, 1607 New Hampshire Avenue NW, Washington DC 20009

Phi Delta Kappan, 8th & Union Streets, Bloomington, Indiana 47401

**Physical Therapy, 1156 15th Street NW, Washington DC 22005

Pointer, PO Box 131, University Station, Syracuse, New York 13210

Psychology in the Schools, 4 Conant Square, Brandon, Vermont 05733

Psychology Today, PO Box 2990, Boulder, Colorado 80302

Quarterly Journal of Speech, Speech Communication Association, Statler Hilton Hotel, New York, New York 10001

**Reading Research Quarterly, 6 Tyre Avenue, Newark, Delaware 19711

Reading Teacher, 6 Tyre Avenue, Newark, Delaware 19711

Rehabilitation Digest, One Yonge Street, Suite 2110, Toronto Ontario M5E 1E8, Canada

Rehabilitation Gazette, 4502 Maryland Avenue, St. Louis, Missouri 63108

*Rehabilitation Literature, 2023 West Ogden **Avenue, Chicago, Illinois 60612

Rehabilitation Teacher, 88 St. Stephen Street, Boston, Massachusetts 02115

Remedial Education, 5 Netherlee Street, Glen Iris, Victoria 3146, Australia

Review of Educational Research, 1126 16th Street NW, Washington, DC 20036

Scandinavian Journal of Rehabilitation Medicine, Gamla Brogatan 26, Box 62, S-101 20 Stockholm 1, Sweden

Schizophrenia Bulletin, 5600 Fishers Lane, Rockville, Maryland 20852

School Media Quarterly, 1201-1205 Bluff Street, Fulton, Missouri 65251

*Sight Saving Review, 79 Madison Avenue, New York, New York 10016

Sign Language Studies, Linstock Press, 9306 Mintwood St., Silver Spring, Maryland 20901

*Slow Learning Child, St. Lucia, Brisbane 4067, Australia

**Social Work, 49 Sheridan Avenue, Albany, New York 12210

Southern Journal of Educational Research, Box 107, Southern Station, Hattiesburg, Mississippi 39401

Special Children, American Association of Special Educators, 107-20 125th Street, New York, New York 11419

*Special Education: Forward Trends, National Council for Special Education, 12 Hollycroft Avenue, London NW3 7QL, England

Special Education in Canada, Parkway V S, 1 Danforth Avenue, Toronto, Ontario, Canada

Speech Monographs, Speech Communication Association, Statler Hilton Hotel, New York, New York 10001

Teacher, 22 West Putnam Avenue, Greenwich, Connecticut 06830

Teacher of the Blind, Royal School for the Blind, Church Road North, Wavertree, Liverpool L156TQ, England

Teacher of the Deaf, 50 Topsham Road Exeter EX2 4NF, England

Teachers College Record, 525 West 120th Street, New York, New York 10027

**TEACHING Exceptional Children, 1920 Association Drive, Reston, Virginia 22091

*Volta Review, 3417 Volta Place NW, Wash-**ington, DC 20007

Young Children, 1384 Connecticut Avenue NW, Washington, DC 20009

ABSTRACT 1633

EC 002 304 ED N.A.
Publ. Date Jan 68 5p.
Rosecrans, C. J.
The Relationship of Normal 21-Trisomsy Mosaicism and Intellectual Development.
EDRS not available
American Journal Of Mental Deficiency; V72 N4 P562-6 Jan 1968

Descriptors: exceptional child research; mentally handicapped; educable mentally handicapped; intelligence level; medical evaluation; research reviews (publications); genetics; anomalies; mongolism; prediction; cytology

A review of the 31 cases of mosaic Down's syndrome (normal/21 trisomy mosaicism) found in the literature investigated the correlation between aberrant cell percentages and intelligence. The 20 cases which reported intelligence yielded a mean IQ of 65, considerably higher than that generally reported for Down's syndrome. For the 20 cases, percentages of aberrant cells were correlated with intelligence; abnormal blood cells and IQ correlated minus .31 (p less than .10); abnormal skin cells correlated minus .89 (p less than .001); and highest percentage of either skin or blood cells correlated minus .68 (less than .001). Correlations of chronological age with IQ, abnormal blood cells, or abnormal skin cells were not significant. For mosaic mongoloids, use of percentages of abnormal cells was suggested for assisting in prediction of intelligence. (LE)

ABSTRACT 1681

EC 003 891 ED 030 235
Publ. Date 68 18p.
Greenough, Diane
Comprehension and Imitation of Sentences by Institutionalized Trainable Mentally Retarded Children as a Function of Transformational Complexity.
Michigan University, Ann Arbor, Center For Research On Language And Language Behavior;
Mount Pleasant State Home And Training School, Mount Pleasant, Michigan
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
BR-6-1784

Descriptors: exceptional child research; mentally handicapped; transformations (language); comprehension; imitation; cognitive processes; trainable mentally handicapped; institutionalized (persons); mongolism; pictorial stimuli; verbal stimuli; negative forms (language); kernel sentences; sentence structure; complexity level; deep structure; surface structure; language development

The ability of 31 institutionalized trainable mentally retarded mongoloid and nonmongoloid subjects (mean IQ equals 27.5) to comprehend and imitate verbally presented sentences of varying levels of grammatical complexity was examined. Eight stimulus sentences were spoken for four pairs of pictures, simple declarative or kernel, negative, passive, and negative passive. Subjects were asked to select one of a pair of pictures for each sentence and then to repeat the sentences. They correctly comprehended kernel sentences significantly more often than other kinds of sentences. Among nonmongoloid subjects, imitation of sentences to which one optional transformation had been applied was significantly better than imitation of sentences modified by two potential transformations. Chronological age was significantly associated with imitation ability in nonmongoloids (p less than .04); IQ and imitation ability were significantly associated in mongoloids (p less than .05), indicating that the ability to store verbal material for immediate recall is associated with general intellectual or cognitive abilities. (Author/RJ)

ABSTRACT 79

EC 004 568 ED N.A.
Publ. Date Sep 69 4p.
Castaldo, Vincenzo
Down's Syndrome: A Study of Sleep Patterns Related to Level of Mental Retardation.
EDRS not available
American Journal Of Mental Deficiency; V74 N2 P187-90 Sept 1969

Descriptors: exceptional child research; mentally handicapped; sleep; electroencephalography; mongolism

EEG, EMG, and EOG were continuously recorded in 10 adolescent mongoloid male subjects who slept four consecutive nights in the laboratory. Subjects were divided in two groups matched for age: moderate and severe mental retardation. The severe group had less Rapid Eye Movement (REM) sleep time and greater REM-latency than the moderate group. The discussion of these results referred to the possible relationship between REM-sleep and intellectual functioning, to the psychoanalytic theory of dreams and to recent biochemical discoveries. (Author)

ABSTRACT 1126

EC 004 982 ED N.A.
Publ. Date Nov 69 10p.
Cornwell, Anne Christake; Birch, Herbert G.
Psychological and Social Development in Home-Reared Children with Down's Syndrome (Mongolism).
EDRS not available
American Journal Of Mental Deficiency; V74 N3 P341-50 Nov 1969
Presented, In Part, At The Kennedy Foundation Scientific Symposium On Mental Retardation (Chicago, April 29, 1968).

Descriptors: exceptional child research; mongolism; social development; psychological characteristics; intelligence; language development; self care skills; age differences; family environment

Data on 44 home-reared children with Down's syndrome (mongolism) on the Stanford-Binet and on the Vineland Social Maturity Scale revealed a broad range of both intellectual and social competence. IQ scores decreased with age whereas SQ scores did not decline as systematically. The age-specific patterns indicated a slow accretion of certain social functions and concomitant impoverishment in advanced social skills. Severe limitations in language and conceptualization were noted throughout. The data supported the hypothesis that in Down's syndrome there is both a developmental lag and an arrest of certain psychological and social capacities. (Author)

ABSTRACT 1629

EC 501 075 ED N.A.
Publ. Date Jan 70 5p.
Geciauskas, Michael A.; Cohen, M. Michael
Mesiodistal Crown Diameters of Permanent Teeth in Down's Syndrome (Mongolism).
EDRS not available
American Journal Of Mental Deficiency; V74 N4 P563-7 Jan 1970

Descriptors: exceptional child research; mentally handicapped; dental evaluation; mongolism; dentistry; tooth size

Plaster casts of the dentition of 50 individuals (21 males and 29 females) between the ages of 16 and 36 with Down's syndrome were measured and compared with measurements of 658 cases of normal North American Caucasians. The mesiodistal diameters were measured on all of the permanent maxillary and mandibular teeth with the exception of third molars, since many were unerupted or missing. All of the permanent teeth of the Down's patients except for the maxillary first molars and the mandibular central incisors showed a reduction in their mesiodistal diameters at a statistically significant level. (Author)

ABSTRACT 1785

EC 000 938 ED N.A.
Publ. Date Nov 66 5p.
Junkala, John B.
Changes in PMA Relationships in Noninstitutionalized Mongoloids.
EDRS not available
American Journal Of Mental Deficiency; V71 N3 P460-4 Nov 1966

Descriptors: exceptional child research; mentally handicapped; cognitive processes; cognitive development; intelligence; age differences; mongolism; trainable mentally handicapped

The Primary Mental Abilities Test for ages 5 to 7 was administered to 79 noninstitutionalized mongoloids (mean age 16-6, mean mental age 5-4, mean IQ 39.3). Mental age means were not significantly different for groups with chronological ages below 15-7 or above 15-6 but were significantly greater for older than for younger groups. The same dichotomous distribution occurred in IQ means between groups aged below 13-7 and above 13-6. Correlation coefficients

for all subtest combinations within both elements of each dichotomy showed no appreciable decreases with increasing chronological age in the degrees to which primary mental abilities were interrelated. There was little evidence to suggest differentiation of abilities in the older groups. (Author/LE)

ABSTRACT 2170

EC 501 208 ED N.A.
Publ. Date May 70 11p.
Kaplan, Arnold R.; Zsako, Steven
Biological Variables Associated with Mothers of Children Affected with G1-Trisomy Syndrome (Down's Syndrome).
EDRS not available
American Journal Of Mental Deficiency; V74 N6 P745-55 May 1970

Descriptors: exceptional child research; mentally handicapped; mongolism; biological influences; genetics; metabolism

Mothers of children affected with Down's syndrome have shown significantly higher incidences of positive family histories than either the affected children's fathers or other mothers, for mental retardation, selected congenital anomalies, and multiple malignancies. Both mothers and fathers of affected children, but not the siblings, have shown higher incidence of simian crease than the general-population incidence. The mothers of affected children have shown higher incidences of low protein-bound iodine, positive cephalin-flocculation tests, thyroid autoantibodies, antinuclear antibodies, and high antistreptolysin-O titers. The variables are discussed in a context regarding increased predispositions for occurrence of G1-chromosome nondisjunction during ovagenic meiosis. (Author)

ABSTRACT 2240

EC 005 308 ED N.A.
Publ. Date Jan 70 11p.
Fabia, Jacqueline; Drolette, Margaret
Malformations and Leukemia in Children with Down's Syndrome.
Harvard School Of Public Health, Boston, Massachusetts;
International Children's Center, Paris, France
National Cancer Institute, Bethesda, Maryland;
Public Health Service (DHEW), Washington, D. C.
EDRS not available
Pediatrics; V45 N1 Part I P60-70 Jan 1970

Descriptors: exceptional child research; anomalies; mongolism; physical characteristics; Leukemia

Cases of Down's Syndrome born alive from 1950-1966 in Massachusetts were studied for associated abnormalities. By organ system, the most frequent malformations were of the cardiovascular system followed by the digestive tract and the extremities. Results relating to maternal age, sex differences, and birth weight are reported. Of 2,421 infants, 23 cases of leukemia were found which were characterized by a high neonatal death rate, a shift over time in sex distribution and two cases of an excess in mosaics versus 3 expected. More of the mongoloids had three or more malformations than would be expected. (RJ)

ABSTRACT 2371

EC 001 357 ED N.A.
Publ. Date Aug 67 13p.
Zisk, Paulette Kender; Bialer, Irv
Speech and Language Problems in Mongolism: A Review of the Literature.
EDRS not available
Journal Of Speech And Hearing Disorders; V32 N3 P228-41 Aug 1967

Descriptors: exceptional child research; mentally handicapped; mongolism; psycholinguistics; language development; articulation (speech); language rhythm; voice disorders; oral communication; research reviews (publications)

Research on oral communication and mongolism is reviewed. Areas covered are as follow: symbolization, including psycholinguistic function and language development; articulation; rhythm; and phonation. A bibliography cites the 30 studies reviewed, which date from 1947 through 1965. (JD)

ABSTRACT 2996

EC 006 212 ED N.A.
Publ. Date Jul 70 4p.
Talkington, Larry W.; Hall, Sylvia M.
Matrix Language Program with Mongoloids.
EDRS not available
American Journal Of Mental Deficiency; V75 N1 P88-91 Jul 1970

Descriptors: exceptional child education; mongolism; language instruction; concept formation; mentally handicapped; Matrix Games

Pre- and posttest measures were taken on Experimental and Control groups of mongoloids matched on IQ and CA. The Experimental group, which received the Matrix language training, made significant gains in the language and concept areas of sentences, total language, differences, similarities, missing parts and total concepts. The results supported the feasibility of such a procedure for the training of language and concept formation in such a population. (Author)

ABSTRACT 2997

EC 006 213 ED N.A.
Publ. Date Jul 70 10p.
Francis, Sarah H.
Behavior of Low-Grade Institutionalized Mongoloids: Changes with Age.
EDRS not available
American Journal Of Mental Deficiency; V75 N1 P92-101 Jul 1970

Descriptors: exceptional child research; mongolism; behavior change; institutionalized (persons); age; behavior patterns; mentally handicapped

Observations using a time-sampling method showed that with increasing age, low-grade institutionalized mongoloids exhibit an increase in self-oriented behavior, in postures, in rocking, and in diffuse movements, and a decreasing interest in the external world (as measured by the focus of their visual attention, manipulation of objects, and the amount of social contact in which they are engaged). More changes in behavior occur between the ages of four and 13 years and after 30 years than at other ages. It is suggested that the behavioral changes are due to institutionalization rather than to aging. (Author)

ABSTRACT 3307

EC 006 295 ED N.A.
Publ. Date 70 8p.
Weinberg, Bernd; Zlatin, Marsha
Speaking Fundamental Frequency Characteristics of Five-and Six-Year-Old Children with Mongolism.
National Institute Of Child Health And Human Development, Bethesda, Maryland, Childrens Diagnostic And Study Branch;
National Institute Of Dental Research, Bethesda, Maryland
EDRS not available
Journal Of Speech And Hearing Research; V13 N2 P418-25 Jun 1970

Descriptors: exceptional child research; mentally handicapped; speech skills; mongolism; voice disorders; electronic equipment

Spontaneous speech samples of 27 children with trisomy-21 type Down's syndrome and 66 normal children were tape recorded and analyzed for mean fundamental frequency, standard deviation, and range. Results indicate that the mean speaking fundamental frequency (SFF) level for the sample of children with mongolism was significantly higher than the mean SFF level for the control sample. Approximately 50% of the children with mongolism had mean SFF levels exceeding the highest mean SFF level of their matched controls. In only two cases did the mean SFF for a child with mongolism fall below the mean SFF level for control children of the same age and sex. No child with mongolism exhibited a mean SFF level below the lowest mean SFF for any control subject. The subject in question is the clinical observation that children with mongolism typically have low voice fundamental frequency levels. (Author)

ABSTRACT 3572

EC 006 155 ED 042 305
Publ. Date 69 113p.
Rhodes, Leanne And Others
A Language Stimulation and Reading Program for Severely Retarded Mongoloid Children: A Descriptive Report. California Mental Health Research Monograph No. 11.
California State Department Of Mental Hygiene, Sacramento, Bureau Of Research
EDRS mf,hc

Descriptors: exceptional child education; mentally handicapped; mongolism; language development; institutional environment; enrichment programs; language skills; language instruction; reading instruction; intellectual development; program descriptions

A longitudinal research study of the

growth and development of 10 severely mentally handicapped mongoloid (Down's Syndrome) children reared together in a state hospital was conducted. They were tested regularly on the same scales, providing comprehensive histories of mental, psychomotor, and physical growth. When comparison with similar children reared at home emphasized the declining developmental patterns of the institutionalized group, an environmental stimulation program (eventually including reading) was designed to overcome their relative retardation. Intensive language stimulation training was the focal point. Described are means used to make the environment more stimulating, better structure daily routine, and motivate staff. Initial language stimulation and articulation training is outlined, including modifications made as the program progressed. Aspects of reading training and instruction are summarized. Findings thus far show improvement in articulation, greater expressive use of language, more extensive receptive language, significant increase in intellectual ability, and ability to read and enjoy simple books. Asocial behaviors have almost disappeared and destructive, random, or stereotyped acts have decreased. (KW)

ABSTRACT 998

EC 03 0998 ED N.A.
Publ. Date 70 110p.
Cowie, Valerie A.
A Study of the Early Development of Mongols.
EDRS not available
Pergamon Press, Inc., Maxwell House Fairview Park, Elmsford, New York 10523 ($8.00).

Descriptors: exceptional child research; mentally handicapped; mongolism; child development; infancy; motor reactions

Designed to examine the pattern of development (specifically in reference to early infantile reflexes) among infants exhibiting mongolism, a study was made involving 79 mongols examined during the neonatal period and at 6 weeks, 6 months, and 10 months of age. Results of the examinations showed specific characteristics of the mongolism condition relating to muscle tone, traction response, ventral suspension, moro reflex, palmer grasp and plantar grasp, automatic stepping, patellar reflex, placing reaction, strabismus, and chromosomal findings. Photographs and tables are provided to illustrate the data. (RD)

ABSTRACT 1222

EC 03 1222 ED N.A.
Publ. Date 70 11p.
Peters, Martha L.
A Comparison of the Musical Sensitivity of Mongoloid and Normal Children.
EDRS not available
Journal Of Music Therapy; V7 N4 P113-23 Win 1970

Descriltors: exceptional child research; mentally handicapped; mongolism; music; average students

To investigate and measure the basic musical sensitivity of mentally handicapped children and to compare them with normal children, four groups of ten children were tested. It was found that reactions of mentally handicapped children to music are similar to those of normal younger children. No evidence that mentally handicapped children have heightened musical sensitivity was substantiated. (CD)

ABSTRACT 1396

EC 03 1396 ED
Publ. Date 71 213p.
Buddenhagen, Ronald G.
Establishing Vocal Verbalizations in Mute Mongoloid Children.
EDRS not available
Research Press Company, 2612 North Mattis Street, Champaign, Illinois 61820 ($9.95).

Descriptors: exceptional child education; mongolism; institutionalized (persons); behavior change; verbal operant conditioning; mentally handicapped; voice disorders; mutism

Behavior modification as an attack upon the problem of mutism in mongoloid children establishes the basis of the text. Case histories of four children in a state institution present the specific strategy of speech therapy using verbal conditioning. Imitation and attending behavior, verbal chaining, phonetic theory, social reinforcement, deprivation, and punishment are all examined in relation to the four subjects. The etiology of mutism among institutionalized mongoloid children is dealt with in a separate section. A glossary of phonetic symbols and terminology conclude the text. (CD)

ABSTRACT 1419

EC 03 1419 ED N.A.
Publ. Date Sep 69 145p.
Lilienfeld, Abraham M.
Epidemiology of Mongolism.
EDRS not available
Johns Hopkins Press, Baltimore, Maryland 21218 ($7.00).

Descriptors: mentally handicapped; mongolism; research reviews (publications); literature reviews; incidence; racial factors; ethnic groups; age differences; prenatal influences; family structure; biochemistry; death; statistical data

The review and assessment of the literature on mongolism contains much statistical information. Emphasis is upon differences in the frequency of mongolism, or Down's syndrome, under various conditions and upon the differentiating characteristics of persons who have the disease. Following a background discussion of epidemiology and mongolism, information is presented on the incidence of mongolism in general and in relation to racial and ethnic groups, maternal and paternal age, grandparents' age, and birth order. Also presented are the results of studies on clustering (i.e., distribution in time and space), maternal and prenatal factors, familial aggregation and twins, association of mongolism with other diseases such as leukemia and thyroid disease, biochemical aspects, blood groups, and mortality experience. Etiological hypotheses based on these data are considered and additional epidemiological research suggested. (KW)

ABSTRACT 2238

EC 03 2238 ED N.A.
Publ. Date Mar 68 72p.
Roberts, Nancy
David.
EDRS not available
John Knox Press, 801 East Main Street, Box 1176, Richmond, Virginia 23209 ($4.50).

Descriptors: mentally handicapped; mongolism; parent education; parent role; parent attitudes

The mother of David, a mongoloid boy, recounts her feelings and experiences surrounding her son's birth, development, and her own acceptance of his handicap. Illustrated with numerous photographs taken by David's father, the text presents a subjective description of parental adjustment to a child's disability. Aspects covered include helpful literature and associations to assist parents, David's characteristics and activities in infancy and early childhood, nursery school and speech therapy, diagnoses and medical evaluations, and the need for national concern and additional services. (RD)

ABSTRACT 2299

EC 03 2299 ED N.A.
Publ. Date Mar 71 14p.
Johnson, John T., Jr.; Olley, Gregory J.
Behavioral Comparisons of Mongoloid and Nonmongoloid Retarded Persons: A Review.
EDRS not available
American Journal of Mental Deficiency; V75 N5 P546-59 Mar 1971

Descriptors: mongolism; literature reviews; behavior patterns; mentally handicapped; comparative analysis

In an effort to provide information concerning the utility of the American Association on Mental Deficiency's medical classification system for psychology, a review is made of the literature that has compared mongoloid and nonmongoloid retarded subjects on behavioral tasks. The studies reviewed are grouped into the areas of mental abilities, sensory processes, learning and conditioning, and reaction time and activation. It is noted that while there appeared to be more similarities than differences between mongoloid and nonmongoloid retarded subjects, several problems are discussed which prohibit firm conclusions. Suggestions are made concerning the elaboration of a viable behavioral classification system for mental retardation. (Author)

ABSTRACT 2307

EC 03 2307 ED N.A.
Publ. Date Mar 71 7p.
Owens, David and Others
Alzheimer's Disease in Down's Syndrome.

EDRS not available
American Journal of Mental Deficiency; V75 N5 P606-12 Mar 1971

Descriptors: mongolism; neurological defects; psychopathology; mentally handicapped; aging; Alzheimer's disease

In order to establish clinical correlates of Alzheimer's disease, psychiatric and neurologic findings obtained from a middle-aged group were compared to those of Down's syndrome patients in their early 20s. The older group were felt to exhibit a significantly greater incidence of abnormality in object identification, snout reflex, Babinski sign, and palmomental sign. It was noted that both groups displayed mild hypertonia, rather than hypotonia, and face-hand test was abnormal in 75% of subjects tested. While dementia was considered uncommon, subtle neurological changes were felt to reflect neuropathological findings present in aging sufferers of Down's syndrome. (Author)

ABSTRACT 2308

EC 03 2308 ED N.A.
Publ. Date Mar 71 4p.
Rundle, A. T.; Atkin, Julia
Serum Alkaline Phosphatase Isoenzymes in Down's Syndrome.
EDRS not available
American Journal of Mental Deficiency; V75 N5 P613-6 Mar 1971

Descriptors: mongolism; medical research; biochemistry; genetics; exceptional child research; mentally handicapped

Starch gel electrophoresis was used to investigate the serum alkaline phosphatases in 75 cases of Down's syndrome. Of these, 51 cases were found to be of the genetic variety, protein pattern (Pp 1) with a single band of activity; 17 cases were found to be of the Pp 2 form, with an additional band of activity of intestinal origin; one case was found with a third band which was tentatively suggested to be the rare normal variant C; and six cases were shown to have a slow-running band of activity in the B-lipoprotein region which may also be normal variants. The findings were discussed with particular reference to gene location on the twenty-first chromosome. (Author)

ABSTRACT 2372

EC 03 2372 ED 050 529
Publ. Date Jan 69 179p.
Fredericks, H. D. Bud
A Comparison of the Doman-Delacato Method and Behavior Modification Method Upon the Coordination of Mongoloids.
Oregon State System of Higher Education, Monmouth, Teaching Research Division
Vocational Rehabilitation Administration (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; mongolism; perceptual motor coordination; social reinforcement; psychomotor skills; behavior change; mentally handicapped; Doman Delacato Method

In order to examine the effects of two treatment methods on the coordination of mongoloid children, 72 mongoloid children (ages 7 to 12) were randomly assigned to groups receiving either the Doman Delacato method or behavior modification procedures utilizing social reinforcement. The children were pre and posttested by the Doman Delacato Profile and a modified version of the Lincoln-Oseretsky Motor Development Scale. At the end of the 9-week treatment, results showed no significant differences between the two treatment methods although the children receiving the behavior modification treatment demonstrated at the conclusion of the study more improved coordination than did the children receiving the Doman Delacato method. Implications and recommendations for further study are outlined. (RD)

ABSTRACT 2719

EC 03 2719 ED 052 560
Publ. Date Jul 71 23p.
Balthazar, Earl E.; Stevens, Harvey A.
Managing the Mentally Retarded Through Interdisciplinary Action.
Central Wisconsin Colony and Training School, Madison
Wisconsin State Department of Health and Social Services, Madison
EDRS mf,hc
Paper Presented at the 90th Annual Meeting of the American Association on Mental Deficiency (Chicago, Illinois, May 12, 1966).

Descriptors: trainable mentally handicapped; interdisciplinary approach; case studies; mongolism; residential care

A philosophy of interdisciplinary management of the severely and profoundly retarded is described in the monograph which also includes reporting and evaluation processes. Ten clinical reports of an actual case are provided to demonstrate the adequacy of the multidisciplinary method. These reports assess the medical condition, psychological adjustment, and biosocial status of an 8-year-old mongoloid girl. It was concluded by the authors that careful study and wise direction of program staffing committees can do much to alleviate some of the difficulties in residential management. (Author)

ABSTRACT 2968

EC 03 2968 ED N.A.
Publ. Date Jun 71 13p.
Moric-Petrovic, Slavka and Others
Cytogenic Survey of Down's Syndrome in Serbia (Yugoslavia): Incidence of Numerical and Structural Abnormalities.
EDRS not available
Journal of Mental Deficiency Research; V15 N2 P102-14 Jun 1971

Descriptors: exceptional child research; genetics; surveys; mongolism; mentally handicapped; Yugoslavia

The incidence of various types of chromosomal anomaly amongst mongoloids in the territory of Serbia (Yugoslavia) was examined. Chromosome analysis was made of 616 families with mongolism in the family. Results were divided into two groups according to whether the mother was under 30 years of age or over at the birth of the mongoloid. Such chromosomal anomalies as translocations and mosaics were noted in the survey and discussed. The sample collected was strongly biased, according to the authors, in favor of younger mothers. Anomalies of large chromosomes are also examined. (CD)

ABSTRACT 2970

EC 03 2970 ED N.A.
Publ. Date Jun 71 9p.
Richards, B. W.
The Incidence of Mongol Twins.
EDRS not available
Journal of Mental Deficiency Research; V15 N2 P121-9 Jun 1971

Descriptors: exceptional child research; mongolism; twins; mental retardation; incidence; surveys; Great Britain

The incidence of twins in a sample (5,941) of mongoloids and their siblings was examined. The survey was taken by questionnaire distributed to relatives or parents. Results indicated that the incidence rose with increasing maternal age. The mongoloids were noted as showing a significant reduction in the incidence of liveborn twins. Researchers advanced possible causes for the reduction in incidence such as increased foetal wastage or stillbirth, or selective mortality. (CD)

ABSTRACT 16

EC 04 0016 ED NA.
Publ. Date Oct 71 5p.
Alfi, Omar S.
Identification of the G Chromosomes in Down's Syndrome by Quinacrine Fluorescence Microscopy.
EDRS not available
Journal of Pediatrics; V79 N4 P656-60 Oct 1971

Descriptors: exceptional child research; mentally handicapped; mongolism; medical research; identification; genetics

Studied was quinacrine fluorescence microscopy of G chromosomes in Down's syndrome, with emphasis on D-G and G-G translocation. It has been found that human mitotic chromosomes have characteristic fluorescence sites that help in their identification and pairing. In the G group of chromosomes, one pair presents bright fluorescence (bright-G) while the other shows faint fluorescence (faint-G). Sixteen patients with G-chromosome abnormality were examined and classified according to karyotypes into four categories. Ten of the patients were identified as having trisomic Down's syndrome; three had G-D translocation; one had G-G translocation Down's syndrome; and two had G-D translocation carriers. It was found that chromosome number 21 was the bright-G chromosome in the patients. Another discovery was that fluorescent patterns enabled identification of the D chromosome in G-D translocation, whether the chromosome was 13, 14, or 15. (CB)

ABSTRACT 136

EC 04 0136 ED N.A.
Publ. Date Sep 71 6p.

Fields, Donald L.; Gibson, David
Forecasting Mental Growth for At-Home Mongols (Down's Syndrome).
EDRS not available
Journal of Mental Deficiency Research; V15 N3 P163-8 Sep 1971

Descriptors: exceptional child research; mentally handicapped; mongolism; intelligence level; predictive measurement; test validity; prediction; child development

A forecast index for adult intellectual level based on early appearing developmental characteristics of noninstitutionalized mongols was studied in the investigation, which tested the maturity level mental age (MA) forecast power of an experimental prophecy index, based on early growth signs of institutionalzied mongols, for a sample of 22 at-home mongols. MA scores, based on the Stanford Binet Intelligence Test, were gathered from schools attended by the subjects, and early development evidence taken from clinic and public health authority records and from parent reports. Predictors investigated were age at teaching, walking, and talking (from the original instrument based on the institutional sample), plus age at independent toileting and sex. Findings indicated that the predictive validity of the instrument was not different from an estimate based on the institutional study. The additional predictors did not increase the power of the equation for a community sample. A factor matrix for the five predictor variables was established to discover possible distinctions between physiologically and culturally susceptible predictors. Environmental susceptibility of early growth in the mongol was tentatively indicated. (KW)

ABSTRACT 485

EC 04 0485 ED 056 444
Publ. Date Aug 70 72p.
Chalfant, James C. and Others
Systematic Instruction for Retarded Children: The Illinois Program--Experimental Edition. Final Report.
Illinois University, Urbana, Institute for Research On Exceptional Children
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-0-8-001025-1777(032)
BR-7-1025

Descriptors: exceptional child research; mentally handicapped; mongolism; language development; program evaluation; custodial mentally handicapped; trainable mentally handicapped

The study sought to develop an integrated training program for children with mongolism based on their observed assets and deficits. The program's three major curricular emphases were self care skills, language development, and motor development needed in recreational activities. The teaching techniques included task analysis, behavior modification, systematic language instruction, and errorless learning. Field testing of the systematic language instruction area of curriculum was conducted in nine classes for custodial and trainable mentally handicapped children in three states. Four teachers received extensive training and supervision; four other teachers received minimal supervision; and one teacher was supervised by long-distance contacts. As a control, four contrast teachers used different curricula. Research findings were that teachers not previously exposed to systematic language instruction could, with supervision, effectively use it, and that retarded children taught by the systematic language instruction achieved better on a set of language concepts than did children exposed to a different method. The study was concluded with the recommendation that a number of demonstration centers be developed. (For related programed instruction guidelines, see EC 040 486, 040 539-41.) (CB)

ABSTRACT 863

EC 04 0863 ED N.A.
Publ. Date Oct 71 18p.
Francis, Sarah H.
The Effects of Own-Home and Institutional-Rearing on the Behavioral Development of Normal and Mongol Children.
EDRS not available
Journal of Child Psychology and Psychiatry; V12 N3 P173-90 Oct 1971

Descriptors: exceptional child research; mentally handicapped; mongolism; preschool children; institutionalized (persons); child rearing; family environment; behavior patterns; child development

Four groups of children, normal and mongol, were studied to determine the effects of own-home and institutional-rearing on their behavioral development. The mongol children were chronologically under 4 years of age and had a mental age of 2 years or less. The normal children were chronologically 2 years old. Three broad categories of behavior were distinguished by the observers. The first category included diffuse movements typical of the infant such as, blank staring, self-oriented behaviors, and watching self. The second category consisted of simple object-oriented behaviors. The third category included more complex behaviors requiring greater skill and visual attention. The differences between normal and mongol development were investigated by comparing the children's levels of development. Comparison of home-and institution-rearing for mongols and normal children took into account differences among children of the same chronological age, developmental levels, environmental factors such as toy availability, use of physical restraint, and amount of social contact received, and alteration of environmental conditions on behavior of institutionalized children. In general, results showed that institution-reared normal and mongol children, when compared with home-reared counterparts of the same chronological age, were behaviorally more retarded. (CB)

ABSTRACT 951

EC 04 0951 ED N.A.
Publ. Date Dec 71 8p.
Skinoj, P. and Others
Hepatitis and Hepatitis Associated Antigen (HAA) in Down's Syndrome.
EDRS not available
Journal of Mental Deficiency Research; V15 N4 P236-43 Dec 1971

Descriptors: mentally handicapped; mongolism; medical research; special health problems; research projects; hepatitis

Investigated was the incidence of hepatitis and hepatitis associated antigen (HAA) in institutionalized Down's syndrome patients in Denmark. HAA was found in 28% of 92 mongol patients and only 3% of the controls (patients with other forms of mental retardation). One half of the HAA positive patients evidenced biochemical and histological evidence of chronic hepatitis. Among the mongols, HAA was positive most frequently in patients who had been institutionalized early, in the younger age group, and primarily in males. Results were seen to support the hypothesis that mongol patients exhibit increased susceptibility to hepatitis. (KW)

ABSTRACT 952

EC 04 0952 ED N.A.
Publ. Date Dec 71 6p.
Kaldor, Jakov; Pitt, David
Down's Syndrome and Immunoglobulins.
EDRS not available
Journal of Mental Deficiency Research; V15 N4 P271-6 Dec 1971

Descriptors: exceptional child research; mentally handicapped; mongolism; medical research; biochemistry; biological influences; immunoglobulins

Studied were immunoglobulin levels in noninstitutionalized (S equals 110) and institutionalized (S equals 100) Down's syndrome subjects and a matched group of controls (104 other institutionalized retarded children). Findings showed a high serum level of IgG in all three groups, with the elevation greatest in institutionalized cases of Down's syndrome. With the exception of adult noninstitutionalized cases of Down's syndrome, levels of IgG were found to rise sharply with increasing age. IgM serum levels were decreased in Down's syndrome when compared to levels found in institutionalized controls, with the decrease most marked in noninstitutionalized Down's syndrome. Implications of the findings, particularly for disease susceptibility of the subjects, were discussed. (KW)

ABSTRACT 982

EC 04 0982 ED N.A.
Publ. Date Nov 71 5p.
Ross, Robert T.
A Preliminary Study of Self-Help Skills and Age in Hospitalized Down's Syndrome Patients.
EDRS not available
American Journal of Mental Deficiency; V76 N3 P373-7 Nov 1971

Descriptors: exceptional child research; mongolism; self care skills; institutionalized (persons); age groups; mentally handicapped

Either Kuhlmann or Stanford-Binets were administered to 187 Down's syndrome patients resident in Fairview State Hospital. At the same time a Fairview Self-Help Scale was filled out for each

individual tested. (Fairview Self-Help Scale total scores correlate with total Vineland scores .96). It was found that total score on the Fairview Self-Help Scale correlated .37 with CA, .88 with MA, and .80 with IQ. These results confirm Doll's findings for institutionalized mentally retarded individuals, but were quite different from the correlations of Cain-Levine Social Competency scores for noninstitutionalized retarded subjects of a somewhat higher level. The implication of the findings of this study was that for the group tested, MA determined the level of Self-Help skills which were, in turn, not significantly related to years of training represented by the CA. (Author)

ABSTRACT 1024

EC 04 1024 ED N.A.
Publ. Date May 71 6p.
MacCubrey, Jean
Verbal Operant Conditioning with Young Institutionalized Down's Syndrome Children.
EDRS not available
American Journal of Mental Deficiency; V75 N6 P696-701 May 1971

Descriptors: exceptional child research; mentally handicapped; mongolism; verbal operant conditioning; language development; operant conditioning; behavior change; teaching methods

Three groups of six institutionalized Down's syndrome children were drawn from two comparable state schools. Pre- and postexperimental evaluations were made with two language measures, the Stanford-Binet (Form L-M) and a social rating scale. Group 1 received 7 weeks of verbal operant conditioning in an experimental environment. Group 2 spent 7 weeks in the same environment without conditioning. Group 3 remained in the institution. Significant positive changes were noted for Group 1 on the Stanford-Binet and one language measure. (Author)

ABSTRACT 1025

EC 04 1025 ED N.A.
Publ. Date May 71 10p.
Herriot, Peter; Cox, A. M.
Subjective Organization and Clustering in the Free Recall of Intellectually-Subnormal Children.
EDRS not available
American Journal of Mental Deficiency; V75 N6 P702-11 May 1971

Descriptors: exceptional child research; mentally handicapped; retention; thought processes; associative learning; mongolism; memorizing; visual stimuli; cognitive processes; serial ordering

Simultaneous presentation of six pictorially presented items to 24 mongoloid and 24 nonmongoloid intellectually-subnormal children resulted in organization in recall. Clustering was found in the recall of categorically related items, and subjective organization in the recall of apparently unrelated items. Significant correlations between clustering and recall were obtained, but not between subjective organization and recall. The clustering condition resulted in higher recall scores than did the subjective organization condition. Degree of rehearsal was negatively correlated with subjective organization in the case of mongoloid subjects, whereas number of repetitions was positively correlated with recall. It was concluded that: subjective organization was sequential in nature, while clustering was mainly hierarchical, failure to internalize language leads to sequential strategies, and mongoloid subjects, in particular, were retarded in internalization. (Author)

ABSTRACT 1029

EC 04 1029 ED N.A.
Publ. Date May 71 4p.
Kerkay, Julius and Others
Immunoelectrophoretic Serum Patterns Associated with Mothers of Children Affected with the G1-Trisomy Syndrome (Down's Syndrome).
EDRS not available
American Journal of Mental Deficiency; V75 N6 P729-32 May 1971

Descriptors: exceptional child research; mentally handicapped; mongolism; mothers; heredity; biological influences; etiology; medical research

Peripheral-blood sera from 46 of 48 mothers of children affected with G1 trisomy have shown an extra precipitant line in the gamma-A region of their immunoelectrophoretic patterns. By comparison, only 10 of 48 age-matched control mothers were positive for the same parameter. The incidence of this high-molecular-weight protein-based antigen in the mothers of G1-trisomy-affected children exceeded the incidence of any of the several other immunological parameters previously investigated. The incidence of the extra precipitant line in the control mothers was lower than the incidence observed in control mothers for any of the several other parameters. (Author)

ABSTRACT 1031

EC 04 1031 ED N.A.
Publ. Date May 71 7p.
Semmel, Melvyn I.; Dolley, Diane Greenough
Comprehension and Imitation of Sentences by Down's Syndrome Children as a Function of Transformational Complexity.
EDRS not available
American Journal of Mental Deficiency; V75 N6 P739-45 May 1971

Descriptors: exceptional child research; trainable mentally handicapped; comprehension; sentence structure; language ability; mentally handicapped; mongolism; complexity level

The effect of sentence complexity on the ability of 40 trainable mentally retarded (TMR) Down's syndrome children with a mean IQ of 34.3 to comprehend and imitate verbally presented sentences was examined in two studies. Subjects correctly comprehended simple declarative (kernel) sentences significantly more often than chance expectancy, but comprehended negative sentences less often than would be expected by chance. Imitation of kernel sentences (obligatory transformations only) was significantly better than imitation of sentences in which optional transformations had been applied. No significant differences in accuracy of imitation were observed among the strings with optional transformations. (Author)

ABSTRACT 1271

EC 04 1271 ED N.A.
Publ. Date Jan 72 6p.
Telfer, M. A. and Others
Twins, Probably Monozygotic, Displaying Down's Syndrome, Physical and Functional Mirror-Imaging, and Discordance for Congenital Heart Disease.
EDRS not available
American Journal of Mental Deficiency; V76 N4 P391-6 Jan 1972

Descriptors: exceptional child research; mongolism; twins; anomalies; cardiac (person); mentally handicapped

Clinical, dermatoglyphic, and cytogenetic findings on a pair of 18-year-old twins concordant for sex, trisomy 21, and blood group antigens, but discordant for congenital heart disease, were presented. The twins displayed mirror-imaging of neurological dominance, dentition, and dermatoglyphic features. The probability that they are monozygotic exceeds 99 percent. (Author)

ABSTRACT 1492

EC 04 1492 ED N.A.
Publ. Date Apr 72 2p.
Caccamo, James M.; Yater, Allen C.
The ITPA and Negro Children with Down's Syndrome.
EDRS not available
Exceptional Children; V38 N8 P642-3 Apr 1972

Descriptors: exceptional child research; mentally handicapped; mongolism; psycholinguistics; Negroes; racial differences; cognitive ability

To determine whether handicapped Negro children would demonstrate the superiority in auditory sequential memory noted in previous research with the Illinois Test of Psycholinguistic Abilities (ITPA), the revised edition of the ITPA was administered to a sample of Negro children with Down's syndrome. A comparison of profiles of abilities for this sample with the profile of abilities of Caucasian children with Down's syndrome yielded a statistically significant rank order correlation ($r = .74$, p less than .05), indicating that the Negro Down's syndrome children did not differ significantly from the Caucasian Down's syndrome children in patterns of psycholinguistic ability. (KW)

ABSTRACT 1702

EC 04 1702 ED N.A.
Publ. Date 69 279p.
Benda, Clemens E.
Downs' Syndrome: Mongolism and Its Management.
EDRS not available
Grune and Stratton, Inc., 757 Third Avenue, New York, New York 10017 ($13.75).

Descriptors: exceptional child education; mentally handicapped; mongolism; textbooks; medical evaluation; physical development; cognitive development; biochemistry; pathology; statistical data

Presented is a technical textbook on mongolism that analyzes the mongoloid's physical and cognitive development as they relate to biochemistry and pathology. The introductory chapter explains the history, frequency, and terminology of mongolism. Discussion of the clinical diagnosis at birth is accompanied by diagrams and pictures that clarify the child's deviations from normal physical development. Then reported are areas of physical development and the possible anomalies that may develop in varying degrees. A chapter on anatomic and x-ray observations focuses on the head in mongolism and ossification. Topics considered in the chapter on mental development include emotional response, mimicry, stubbornness, motor development, speech, sensory development, and institutionalization or home care. Examination of hematology and biochemistry includes sections on blood sugar and glucose tolerance and on brain metabolism. Remaining topics analyzed include cytogenetics and molecular pathology, pathology of the nervous system, retardation and fetalism, fetalism with abnormal differentiation, endrocrine and general pathology, prevention and empirical risk figures, and problems of therapy. (CB)

ABSTRACT 1996

EC 04 1996 ED 062 746
Publ. Date 72 41p.
Schlichte, John E.
Genetic Counseling and Mongolism (Down's Syndrome).
Fitchburg State College, Massachusetts
EDRS mf,hc

Descriptors: exceptional child services; mongolism; genetics; parent counseling; prevention; mentally handicapped; anomalies; prediction

Intended for use by the public as well as by medical professionals and related service agencies, the booklet presents genetic counseling as a means of providing information to deal with genetic disorders in general and mongolism (Down's syndrome) in particular. Characteristics of mongolism and possible emotional effects on the family of a mongoloid child are explained. Hereditary factors involved in mongolism are discussed. The birth defect is described to be either inherited or, more frequently, caused by a genetic accident (mutation) occurring at conception. Described are new genetic and genetic counseling procedures involved in preventing mongolism, such as amniocentesis and chromosome analysis. Answered are some specific questions concerning procedures used and recommendations often made in genetic counseling. The application of genetic counseling to the prevention of other birth defects is also discussed briefly. (KW)

ABSTRACT 2531

EC 04 2531 ED N.A.
Publ. Date May 72 7p.
Herriot, Peter
The Effect of Order of Labelling on the Subjective Organization and Clustering of Severely Retarded Adults.
EDRS not available
American Journal of Mental Deficiency; V76 N6 P632-8 May 1972

Descriptors: research projects; mongolism; identification; memory; retention; mentally handicapped; handicapped

Multitrial free recall tasks were presented to 40 retarded adult subjects, 20 mongoloid subjects and 20 nonmongoloid subjects. The material consisted of six simultaneously presented pictures. In the first experiment, the items were apparently unrelated, so the measure of organization employed was subjective organization (SO). There were two conditions: labelling was forced either in the order of the previous recall phase (LARC) or in random order (LARA). Each subject underwent two experimental sessions, each employing different items. There was an overall Conditions effect, with LARC leading to greater SO than LARA. In the second experiment the effect of the same 2 conditions on the clustering (CL) of related items was observed. An overall Conditions effect was found, with LARA resulting in more CL than LARC. However, a Groups X Conditions X Days interaction revealed that the Conditions effect obtained for the mongoloid subjects only on Day 2 and for the nonmongoloid subjects only on Day 1. It was concluded that forced labelling has different effects on the two measures, indicating that they index different processes. (Author)

ABSTRACT 2542

EC 04 2542 ED N.A.
Publ. Date May 72 8p.
Grotz, R. Thomas and Others
A Comparison of the Functional and Intellectual Performance of Phenylketonuric, Anoxic, and Down's Syndrome Individuals.
EDRS not available
American Journal of Mental Deficiency; V76 N6 P710-7 May 1972

Descriptors: exceptional child research; mentally handicapped; self care skills; institutionalized (persons); performance factors; mongolism; eating habits; hygiene; intelligence quotient; phenylketonuria

The Index of Independence in Activities of Daily Living (ADL), primarily used to measure physical independence of elderly and chronically ill persons, was applied to 135 mentally retarded patients, selected equally from three hospitals and three diagnostic categories--phenylketonuria, anoxia, and Down's syndrome. Patients' performance in the acts of bathing, dressing, toileting, transferring continence, and feeding were compared with traditional intelligence test data. Patients with phenylketonuria were found to be the least capable both physically and intellectually, anoxias the most intelligent with an intermediate functional status, and Down's syndrome patients the most physically independent, maintaining an intermediate position of intelligence. Scores on the ADL showed significant correlations with those on the Vineland Social Maturity Scale but not with other traditional intelligence tests. The ADL was discussed as a diagnostic tool for use with retarded patients. (Author)

ABSTRACT 2547

EC 04 2547 ED N.A.
Publ. Date Jul 72 5p.
Chance, Erma R.
Prevalence of Hepatitis Associated Antigen (HAA) in an Institution for the Mentally Retarded.
EDRS not available
American Journal of Mental Deficiency; v77 N1 P1-5 Jul 1972

Descriptors: exceptional child research; mentally handicapped; institutionalized (persons); incidence; mongolism; special health problems; diseases; medical evaluation; hepatitis

The sera of 263 patients of a hospital for the mentally retarded were tested randomly for the presence of the hepatitis associated antigen (HAA). Forty-two of the 263 sera tested contained the antigen (16 percent). In the total group tested, 40 sera were from patients with Down's syndrome. Twenty-one of these sera contained the antigen (52.5 percent). The remaining 223 sera from other mentally retarded patients contained 21 sera positive for the hepatitis associated antigen (9.4 percent). Serum glutamic-pyruvate transaminase values were determined on 100 sera. Forty-five percent of the sera containing the antigen had abnormal values while four percent of the sera without the antigen had abnormal values. The duration of the carrier state appears to be longer in patients with Down's syndrome. Certain factors such as type of mental retardation, ambulation, duration of exposure, age, and sex affect the prevalence rates. Conditions characterizing mentally retarded patients and the institution favor the nonparenteral transmission of hepatitis. (Author)

ABSTRACT 2551

EC 04 2551 ED N.A.
Publ. Date Jul 72 7p.
Dicks-Mireaux, M. J.
Mental Development of Infants with Down's Syndrome.
EDRS not available
American Journal of Mental Deficiency; V77 N1 P26-32 Jul 1972

Descriptors: exceptional child research; mongolism; infancy; cognitive development; motor development; mentally handicapped; child development

The Gesell test was administered five times to 21 Down's syndrome infants between the ages of 16 weeks and 18 months. At the same five key ages a group of 20 normal infants was also given the Gesell test. In each of the three areas of the test, motor, adaptive, and social, the Down's syndrome group showed a developmental quotient (DQ) significantly lower than the normal group already at the age of 16 weeks. Further analysis of the results carried out in

terms of chronological and mental age, rather than the DQ, showed that whereas the normal group conformed to the expected pattern of development, the Down's syndrome infants showed a rate of development which was not only slower than normal but one which progressively deteriorated between the ages considered. (Author)

ABSTRACT 2736

EC 04 2736 ED N.A.
Publ. Date Jan 71 9p.
Gordon, Michael C. and Others
Antibody Responses to Influenza Vaccine in Patients with Down's Syndrome.
EDRS not available
American Journal of Mental Deficiency; V75 N4 P391-9 Jan 1971

Descriptors: exceptional child research; mongolism; disease control; preventive medicine; mentally handicapped; influenza

The increased susceptibility of patients with Down's syndrome to respiratory infections is a well-recognized but poorly understood phenomenon. Little attention has been given to circulating antibody production in these patients. In the present study, polyvalent influenza vaccine was administered to 36 mongoloid and 160 nonmongoloid mentally retarded subjects. Results showed that the nonmongoloid subjects had a significantly better antibody response to the unfamiliar Type A/PR8 antigen, but that there was no difference in response to Type A2. Results on the unvaccinated control subjects indicated that a considerable number of Type B infections had taken place during the course of the study, principally in one cottage. Comparison of the antibody titers in the unvaccinated mongoloid and nonmongoloid residents of this cottage showed that both groups responded equally well to the virus. (Author)

ABSTRACT 2818

EC 04 2818 ED N.A.
Publ. Date Mar 72 9p.
Brooks, D. N. and Others
Hearing Loss and Middle Ear Disorders in Patients with Down's Syndrome (Mongolism).
EDRS not available
Journal of Mental Deficiency Research; V16 N1 P21-9 Mar 1972

Descriptors: exceptional child research; mongolism; hearing loss; auditory perception; auditory tests; mentally handicapped; etiology

Hearing and middle ear function tests were administered to 100 patients with Down's Syndrome. It was found that conductive, mixed, and sensorineural hearing losses were more common in the Down's syndrome group than among the controls. It was speculated that conductive hearing loss was due primarily to exudative otitis media. Early detection and treatment of the condition was thought to result in better communication ability and attainment levels. (CB)

ABSTRACT 2820

EC 04 2820 ED N.A.
Publ. Date Mar 72 6p.
Dodd, Barbara J.
Comparison of Babbling Patterns in Normal and Down-Syndrome Infants.
EDRS not available
Journal of Mental Deficiency Research; V16 N1 P35-40 Mar 1972

Descriptors: exceptional child research; mongolism; infancy; communication skills; verbal ability; mentally handicapped

Investigated were babbling patterns of normal and Down Syndrome infants aged 9 to 13 months. Fifteen minute recordings of spontaneous vocalizations were studied for frequency, length and type of utterance. Evaluation with scales of infant development indicated that the Down syndrome infants were retarded on both mental and motor scales. The two groups' patterns of vocalization were found not to differ on the variables measured. It was concluded that babbling did not reflect intelligence of this stage of development and that babbling was not an important practice activity establishing articulatory skills that would be used in spoken language. (CB)

ABSTRACT 2821

EC 04 2821 ED N.A.
Publ. Date Mar 72 7p.
Rundle, A. T. and Others
A Catch-Up Phenomenon in Skeletal Development of Children with Down's Syndrome.
EDRS not available
Journal of Mental Deficiency Research; V16 N1 P41-7 Mar 1972

Descriptors: exceptional child research; mongolism; physical development; growth patterns; age; mentally handicapped; child growth

Studied were skeletal ages of 74 males and 82 females with Down's Syndrome. Analysis of data using the method of intersecting linear regression indicated that the non-linear growth curve could be represented by two linear segments, with a point of intersection at 8 years of age in the sexes. It was found that the sexes showed no significant differences between the regression equations. The validity of the data, especially with reference to explaining the disparity of findings of other surveys on skeletal development in Down's Syndrome, is discussed. (CB)

ABSTRACT 2921

EC 04 2921 ED N.A.
Publ. Date Sep 72 8p.
Gath, Ann
The Mental Health of Siblings of Congenitally Abnormal Children.
EDRS not available
Journal of Child Psychology and Psychiatry; V13 N3 P211-218 Sep 1972

Descriptors: exceptional child research; mentally handicapped; mongolism; speech handicapped; cleft lip; cleft palate; siblings; mental health; behavior patterns; parent child relationship; discipline problems

An index group of 36 school age siblings of children with Down's syndrome and an index group of 35 school age siblings of children with cleft lip/palate were compared with 71 individually matched school children for emotional and behavioral development. The main research instruments were the Rutter behavioral scales which were devised for completion by parents and teachers and which covered holiday and family outings, interests, hobbies, school work, play patterns and peer visits. A major finding was that neither the siblings of children with Down's Syndrome nor the siblings of children with treated cleft lip/palate had any greater degree of behavioral disturbance than the siblings of control children. It was reported that more than half of the Down's Syndrome families were experiencing moderate or severe management problems while only two of the cleft lip/palate families were meeting moderate difficulties. (GW)

ABSTRACT 286

EC 05 0286 ED N.A.
Publ. Date 71 224p.
Benson, P. F., Ed.
Cellular Organelles and Membranes in Mental Retardation.
EDRS not available
Williams and Wilkins Company, 428 East Preston Street, Baltimore, Maryland 21202 ($13.50).

Descriptors: exceptional child services; mentally handicapped; mongolism; mental retardation; biological influences; medical research; biochemistry

Presented are 15 medical research papers given at a study group on the relationship between biological phenomena at subcellular and molecular levels and mental retardation. The first of four sections includes two papers on membrane conditioned factors: membrane potentials and metabolic performance in mammalian synaptosomes, and distribution and utilization of amino acids in the brain. Considered in the three papers of the second section on renal tubular function and mental subnormality are membrane transport of amino acids, defects in renal tubular reabsorption of amino acids, and Hartnup disease. In the third section, six papers discuss various aspects of lysosomal function and disease: lysosomes in nervous tissue, biochemistry of the mucopolysaccharidoses, aspartylglycosaminuria as a new inborn error possibly due to a lysosomal enzyme defect, types of lysosomal abnormaltiy, biochemistry of the gangliosides in relation to inborn disorders of ganglioside metabolism, and laboratory diagnosis of some sphingolipidoses. The final section of four papers discusses the following aspects of chromosomal redundancy: biochemistry of Down's syndrome, ribonucleic acid synthesis by Down's syndrome leucocytes, the effects of chromosome redundancy on gene expression, and chromosome gain in higher plants. Brief discussions follow 12 of the papers. (DB)

ABSTRACT 488

EC 05 0488 ED N.A.

Publ. Date Sep 72 6p.
Dicker, Lois
Dermatoglyphics and Level of Retardation in Down's Syndrome.
EDRS not available
American Journal of Mental Deficiency; V77 N2 P143-48 Sep 1972

Descriptors: exceptional child research; mongolism; physical characteristics; anatomy; intelligence level; mentally handicapped

The frequency of 23 dermal traits of 48 profoundly retarded monguloid subjects and 51 severely retarded mongoloid subjects (translocated and mosaic mongoloid subjects were excluded from the study) were compared. Two traits, type of the fourth finger line and pattern type in the fourth interdigital area of the left palms, showed significant differences between the two groups, although it could not be ruled out that these were chance findings. The profoundly retarded group was shown to closely resemble other reported Down's Syndrome subjects in frequencies of dermal traits considered characteristic of Down's Syndrome and to differ from frequencies reported in nonretarded subjects for nine of the 10 dermal traits characteristic of Down's Syndrome. (Author/GW)

ABSTRACT 517

EC 05 0517 ED
Publ. Date Jan 72 28p.
Rynders, John E.; Horrobin, Margaret
A Mobile Unit for Delivering Educational Services to Down's Syndrome (Mongoloid) Infants. Research Report #30.
Minnesota University, Minneapolis
Bureau of Education for the Handicapped (DHEW/OE), Washington, D. C.
EDRS mf,hc
OE-09-332189-4533(032)

Descriptors: exceptional child research; mongolism; mobile classrooms; itinerant teachers; language instruction; mentally handicapped; infancy; educational programs; program descriptions

A mobile unit was used over a 2 1/2 month period to demonstrate that a mobile tutoring program for eight infants with Down's syndrome (12 to 18 months old) had certain educational, economic, and logistical advantages. The vehicle and camper body were said to have been chosen according to the following criteria: sufficient height to permit an adult to stand without stooping, basic housekeeping and child care accommodations, a working area large enough to accommodate one child and one adult, and adequate lighting, heating and cooling apparatus. The program employed two undergraduate women selected because of their ability to relate to young children effectively, careful driving habits, excellent language skills, and willingness to help create and carefully implement lesson plans. The curriculum emphasized planned language stimulation through gamelike activities such as finger plays, music, art, tea parties, sandbox activities and water play. It was reported that seven of the eight children adapted readily to the new learning environment and that the cost of providing itinerant teaching services (three hours per child per week) compared favorably with the usual cost of providing a public school teacher for homebound children. (GW)

ABSTRACT 719

EC 05 0719 ED N.A.
Publ. Date 72 156p.
Carver, John N.; Carver, Nellie Enders
The Family of the Retarded Child.
EDRS not available
Syracuse University Press, Box 8, University Station, Syracuse, New York 13210 ($12.00).

Descriptors: exceptional child research; mentally handicapped; custodial mentally handicapped; trainable mentally handicapped; mongolism; hyperactivity; parent attitudes; family attitudes; family problems; residential care; institutions; social attitudes; questionnaires

Reported were the family problems and reactions of 30 sets of parents upon discovering their child to be severely mentally handicapped, to sending him to a state training school, and to subsequent related experiences. All the children were in the same institution and all classified as middle or low grade severely retarded. Data were derived from an interview of 76 questions which dealt with social relationships and behavior within the immediate family, with close friends and relatives, and with neighbors and acquaintances in the community. The questionnaire and answers of one family were given. Mongolism, cerebral palsy, and brain damage were the most common clinical classifiations often complicated by hyperactivity and physical problems, with the inability to function adequately at home given as the common characteristic. Considered were the modifications of family life necessitated by the presence of the child in the home. Changes in family relationships, the helping roles of professionals and neighbors, and changes in social life and recreation patterns were discussed. The waiting period before institutionalization was said to have been characterized by ambivalent feelings and aggravated problems. Told were the events and feelings of commitment day, the later reactions of the families, and the early response of the child. The process of adjustment of the child to the school and the readjustment of the parents to the child's absence were described. Three case studies of families were given. In one family with six other children, the parents kept the child at home until her hyperactivity at 4 years of age and the birth of another child were seen to require the retarded child's institutionalization which was reported to result in a more satisfactory life for the entire family. (DB)

ABSTRACT 1153

EC 05 1153 ED N.A.
Publ. Date Jun 72 9p.
Sinson, Janice; Wetherick, N. E.
Cue Salience and Learning in Severely Sub-Normal Children.
Journal of Mental Deficiency Research; V16 N2 P112-8 Jun 72

Descriptors: exceptional child research; mentally handicapped; trainable mentally handicapped; mongolism; learning characteristics; discrimination learning

Twenty pairs of mongol and non-mongol trainable mentally handicapped children (mean age 11 years) were tested for the ability to learn a discrimination task in one rewarded trial. The first experiment involved the discrimination of shape and color simultaneously, the second the discrimination of shape only, and the third the discrimination of color only. It was suggested from the findings that the trainable mentally retarded can learn to use a simple perceptual cue to predict the presence of a reward if the cue and reward are perceptually identical and that mongols make a color match more quickly than a form match but have difficulty in retaining and generalizing in terms of color. (Db)

ABSTRACT 1313

EC 05 1313 ED N.A.
Publ. Date 73 106p.
Smith, David W.; Wilson, Ann Asper
The Child with Down's Syndrome (Mongolism) Causes, Characteristics and Acceptance.
EDRS not available
W. B. Saunders Company, West Washington Square, Philadelphia, Pennsylvania 19105 ($5.75).

Descriptors: exceptional child education; mentally handicapped; mongolism; genetics; etiology; incidence; physical characteristics social development; intelligence level; family attitudes

Addressed primarily to parents, the book considers the genetic causes of Down's Syndrome, the physical, mental, and social characteristics of children with Down's Syndrome, and family adaptation to the presence of a handicapped child. Discussed are the genetic patterns of children with Down's Syndrome, the general risk and recurrence risk for Down's Syndrome, and prebirth detection of the syndrome. Described are physical indications of Down's Syndrome (such as poor muscle tone, short neck, dry skin, and a tendency toward heart defects), the mental and social characteristics of Down's children (including delayed speech, a flair for mimicry, and enjoyment of people), and serious physical problems typical of children with Down's Syndrome including susceptibility to infection, heart problems, problems in the intestinal tract, and eye problems). Included is a photo album of infants, children, and adults with Down's Syndrome in which captions indicate the life style of each S. A final chapter discusses family adjustment to a child with Down's Syndrome, emphasizing the following ideas: honesty about thoughts and emotions; the importance of realizing that each family member requires love and attention; recognition of individual personality of the Down's child; and acceptance and approval of the child with Down's Syndrome. (GW)

ABSTRACT 1495

EC 05 1495 ED N.A.
Publ. Date 72 131p.

Chigier, E.
Down's Syndrome: A Cross Culture Study of Child and Family in Israel.
EDRS not available
Lexington Books, D. C. Heath & Company, 125 Spring Street, Lexington, Massachusetts 02173 ($12.50).

Descriptors: exceptional child research; mentally handicapped; mongolism; cross cultural studies; cultural differences; foreign countries; parent attitudes; Israel

Reported was a cross cultural study of Down's Syndrome in Israel comparing familial and cultural factors of 103 children of Western extraction and 81 children of Eastern families. Israel was seen to provide a unique opportunity for the study because the large number of immigrants has precluded major cultural integration. The cultural makeup of Israel was described as background to the study. Methodology consisted primarily of analysis of a medical examination form filled out by the physician and a medical history form and social history and parental attitude form both filled out by the social worker during a home interview. Major medical findings were found to confirm previous findings such as the older average age of mothers of children with Down's Syndrome. The European family was found to be generally smaller and of higher socioeconomic status than the Oriental family. In an examination of the present situation, social development, behavior pattern, and relationship with siblings, the Down's Syndrome child was reported more likely to show withdrawn, passive-aggressive or low prosocial behavior than the normal child. It was suggested from the relationship of culture to maternal reactions that the successful approach to the Oriental mother may be home visiting rather than group meetings. Maternal attitudes of self blame, family limitation, discipline, and institutionalization were not found to correlate with ethnic origin. Differences in paternal attitudes were also not found to relate to ethnic differences. The major conclusion was that cultural factors function indirectly in varying emphases on education, social mobility, and attitudes of control over the ecological situation including the birth of children. (DB)

ABSTRACT 1654

EC 05 1654 ED N.A.
Publ. Date May 73 3p.
Aase, Jon M. and Others
Small Ears in Down's Syndrome: A Helpful Diagnostic Aid.
Journal of Pediatrics; V82 N5 P845-7 May 73

Descriptors: exceptional child research; mentally handicapped; mongolism; medical research; medical evaluation; physical characteristics; Ear Length

To determine whether measurement of ear size could be an aid in the diagnosis of Down's syndrome the ear length was measured of 25 neonate, 25 older infants, and 153 older children and adults all of whom had been diagnosed as having Down's syndrome by other criteria. Ear length measurements from birth to 1 year were commonly more than two standard deviations below the norm while values in older children and adults were consistently one standard deviation or more below normal. (DB)

ABSTRACT 1803

EC 05 1803 ED 075 974
Publ. Date Nov 72 22p.
Risto, Kaariainen
Differences in Ability Factor Profiles between Mongoloid and Nonmongoloid Retarded Subjects in Discriminant Analysis and After Covariance Adjustments.
EDRS mf,hc

Descriptors: exceptional child research; mongolism; intelligence differences; psychomotor skills; visual perception; mentally handicapped

Investigated were psychological differences between 24 mongoloid and 56 nonmongoloid retarded Ss (mean age 17 years) by means of analyses of covariance and a discriminant analysis. After the covariance adjustments, only the psychomotor factor differed significantly between mongoloid and nonmongolid groups. The visual perception factor was the only mongolid ability with a higher mean value than the same ability in nonmongoloids. (DB)

ABSTRACT 1959

EC 05 1959 ED N.A.
Publ. Date Mar 73 6p.
Dignan, Peter St. J.
Polydactyly in Down's Syndrome.
American Journal of Mental Deficiency; V77 N5 P486-91 Mar 73

Descriptors: exceptional child research; multiply handicapped; mongolism; anomalies; medical case histories

Reported were four cases in which polydactyly occurred in association with Down's Syndrome in children ranging in age from 2 years to 18 years at the time of examination, all of whom were white. The presence of polydactyly did not appear to have any predictable associations in the cases studied. (DB)

ABSTRACT 1963

EC 05 1963 ED N.A.
Publ. Date Mar 73 9p.
Sidman, Murray; Cresson, Osborne, Jr.
Reading and Crossmodal Transfer of Stimulus Equivalences in Severe Retardation.
American Journal of Mental Deficiency; V77 N5 515-23 Mar 73

Descriptors: exceptional child research; mentally handicapped; mongolism; young adults; reading; basic reading; transfer of training; stimulus generalization

Two severely retarded Down's syndrome boys (18 and 19 years old) were first taught to match printed words to each other (visual discrimination), and to match dictated words to their corresponding pictures (auditory comprehension), but were still incapable of matching the printed words to their pictures (reading comprehension), or of reading the printed words orally. They were next taught to match the dictated to the printed words, and were then able to read the words orally and with comprehension. The learned equivalences of dictated words to pictures and to printed words transferred to the purely visual equivalence of printed words to pictures. The success of the mediated-transfer paradigm suggests that inability to achieve crossmodal tranfer of stimulus equivalences is not necessarily the cause of reading deficiency in severe retardation, and provides a technique for introducing severely retarded children to simple reading skills. (Author)

ABSTRACT 1997

EC 05 1997 ED N.A.
Publ. Date Mar/Apr 7p.
LaShan, Eda
Who Cares What Happens to Miriam?

Exceptional Parent; V3 N1 P11-7 Mar/Apr 73

Descriptors: exceptional child education; mentally handicapped; mongolism; infancy; interviews; parent role

Presented is the transcript of a television interview with the parents of a 20-month-old child with Down's Syndrome. Expressed is the frustration and resentment felt toward insensitive physicians and other professionals who assumed the parents would want to institutionalize the child. Noted are the effects of the handicapped child on the marriage and on an older normal sibling. Efforts to get informational help on the management and education of the child are described, and are reported to have resulted in the development of a day care program, and the writing of a proposal for a community program for retarded infants. (DB)

ABSTRACT 2054

EC 05 2054 ED N.A.
Publ. Date Sep-Dec 7p.
Ardran, G. M. and Others
Tongue Size in Down's Syndrome.
Journal of Mental Deficiency Research; V16 N3 P160-6 Sep/Dec 72

Descriptors: exceptional child research; mentally handicapped; mongolism; medical research; physiology; medical treatment; Tongue

Evaluated by radiography was tongue size relative to the mouth cavity in eight children from 5 to 15 years of age with Down's syndrome. In none of the children was the tongue generally enlarged though five children had localized enlargement in the region of the lingual tonsil resulting in the narrowing of the lower pharynx and of the superior laryngeal aperture. All the children examined had enlarged adenoids and tonsils; three patients showed inferior overjet; and two patients showed edge to edge apposition of the anterior incisor teeth. Gaping mouth and protrusion of the tongue in Down's syndrome patients may be related to the need to provide an airway which surgical removal at a suitable age of obstructions such as adenoids and tonsils may alleviate. Surgery might also favorably influence jaw development, improve the voice, prevent respiratory illness and reduce morbidity and mortality. (DB)

ABSTRACT 2147

EC 05 2147 ED N.A.
Publ. Date Sum 73 9p.
Dalton, A. J. and Others
Some Effects of Token Rewards on School Achievement of Children with Down's Syndrome.
EDRS not available
Journal of Applied Behavior Analysis; V6 N2 P251-9 Sum, 1973

Descriptors: exceptional child research; mentally handicapped; mongolism; childhood; behavior change; operant conditioning; academic achievement

The effectiveness of a token economy system in producing improvement in the academic performance of 7 children (ages 6 to 14 years) with Down's syndrome was tested. The Ss received token reinforcement for correct responses and showed significant improvement both in arithmetic and language. A second matched group of six children received only verbal praise for correct responses to the same instructional materials and failed to improve in arithmetic but showed significant gains in language. Re-test scores one year later revealed that the token group maintained its gains in both subjects whereas the language performance of the no-token group showed a significant decline. (Author)

ABSTRACT 2201

EC 05 2201 ED N.A.
Publ. Date 72 241 p.
Turkel, Henry
New Hope for the Mentally Retarded —Stymied by the FDA.
EDRS not available
Vantage Press, Inc., 516 West 34th Street, New York, New York 10001 ($5.95).

Descriptors: exceptional child research; mentally handicapped; mongolism; drug therapy; federal government; government role; metabolism; medical treatment; medical case histories

Presented is the case for allowing interstate shipment of the 'U' series of drugs currently banned by the Food and Drug Administration (FDA) for mongoloid patients, and discussed is the resistance to the use of the drugs by organized medicine, the FDA, and a private research foundation. The drugs are reported to have been banned because of lack of rigorous proof of their effectiveness though they have been proven to be harmless. Noted is the effect of inborn errors of metabolism such as phenylketonuria to produce brain damaging alternate metabolites. It is suggested that the effects of the genetic condition of mongolism may result from the increased production of harmful metabolites. The 'U' Series of drugs is intended to clear out the excess metabolites and consists of standard medicines acting synergistically as well as thyroid extract and nutrients. The 'U' series is compared to L-dopa which is approved to treat Parkinsonism. Case histories are offered in which improvement in appearance and mental functioning followed treatment with the 'U' series. The drugs are reported to have been criticized for failing to be validated by double blind studies which the author opposes on ethical grounds. Stressed is the right of patients to receive treatment. Also proposed is a theory of drug abuse, criminal behavior, and mental aberrations which postulates underlying metabolic disorders. Readers are encouraged to agitate for approval of the drug series. (DB)

ABSTRACT 2322

EC 05 2322 ED 079 908
Publ. Date Jan 73 9p.
Rynders, John
Two Basic Considerations in Utilizing Mothers as Tutors of Their Very Young Retarded or Potentially Retarded Children.
Minnesota University, Minneapolis. Research, Development and Demonstration Center in Education Of Handicapped Children
Bureau of Education for the Handicapped (DHEW/OE), Washington, D. C.

EDRS mf,hc
OE-09-332189-4533(032)
332189
Occasional Paper #12

Descriptors: exceptional child reserch; mongolism; early childhood education; mothers; tutoring; mentally handicapped; infants; child development; mother attitudes; research reviews (publications)

The paper reviews studies showing positive and negative effects of maternal tutoring on retarded and potentially retarded infants and children. Results of one of the studies reviewed, on the effects of mother-child interaction on exploratory behavior of Down's syndrome infants (1 1/2 to 3 years of age), indicate that normal and retarded children spend more time exploring objects when the mother is interactive than when she is neutral. Results of a Project EDGE study reveal that Down's syndrome children, 2 1/2-years-old, previously tutored for 18 months, could identify more curriculum and noncurriculum objects than nontutored mongoloid children. A conclusion based on the research reviewed suggests that maternal tutoring is effective in promoting receptive language development and exploratory behavior. Negative effects considered are mother discomfort in the tutoring role and overzealousness or overstimulation, which may be deleterious to intellectual development. Cited are studies to show that quiet, intimate mother-child interactions relate positively and consistently to the child's intellectual development, that use of a training hierarchy permits a child to assert his own problem solving ability, and that arrangement of appropriate tasks and materials maximizes the child's chance for mastery. (MC)

ABSTRACT 2354

EC 05 2354 ED N.A.
Publ. Date Mar 73 6p.
Moore, B. C.
Some Characteristics of Institutionalised Mongols.
Journal of Mental Deficiency Research; V17, 1 P46-51 Mar 73

Descriptors: exceptional child research; mentally handicapped; mongolism; young adults; institutionalized (persons); surveys; demography; psychological characteristics

Reported were characteristics of 2,748 institutionalized mongoloids derived from a census of 22 western institutions for the mentally retarded. It was found that mongols made up 11% of the institutionalized population, the largest single etiological category; that the mean age of the mongols was 22 years, that intelligence level of mongols tended to be lower than that of other institutionalized retardates, that mongols were less successful in communication skills than in other social skills, and that epilepsy was found to be less prevalent among mongols than other etiological groups. (DB)

ABSTRACT 2462

EC 05 2462 ED 081 148
Publ. Date 72 80p.
Bricker, Diane; Bricker, William
Toddler Research and Intervention Project Report-Year II. IMRID Behavior Science Monograph No. 21.
George Peabody College for Teachers, Nashville, Tenn. Institute on Mental Retardation and Intellectual Development
National Institute of Child Health and Human Development (NIH), Bethesda, Maryland
EDRS mf,hc

Descriptors: exceptional child education; exceptional child research; intervention; behavior change; parent role; mentally handicapped; mongolism; learning disabilities; minimally brain injured; infancy; early childhood education; demonstration project; operant conditioning; teacher education; research design; program descriptions; curriculum; research methodology

The report summarizes the second year of the Toddler Research and Intervention Project, which uses experimental research to devise and evaluate educational intervention techniques with approximately 28 normal or developmentally delayed children 1- to 4-years-old and their families. Described are researchers/teachers relationships, behavioral modification techniques taught to parents to reinforce their children's learning while at home, and program effectiveness. The etiologies of the 12 delayed children are said to include Down's syndrome, hydrocephalus, and brain injury. Classroom procedures, schedules (for two separate classes for younger and older children, four days per week), and activities (such as teacher giving directions which the child imitates with physical aid from parent or other teacher who sits behind child), are discussed. Presented in a lattice schema are the five sequential general curriculum areas of behavioral control, motor development, imitation, discrimination and classification, and language training. It is said that the third year's focus will be on social and self-help skills. Emphasized are independent walking procedures and ex-

pressive vocabulary training. Reported in five research studies are an operant approach to assessing toddlers' hearing acuity, an evaluation of new assessment instruments in the areas of receptive and expressive vocabulary, a comparison of receptive vocabulary skills in delayed and nondelayed toddlers, evaluation of a modified fading procedure in discrimination learning of delayed children, and the reliability and validity of a parental teaching style assessment scale. (For related information see EC 041 329 and EC 052 459). (MC)

ABSTRACT 2405

EC 05 2605 ED 082 405
Publ. Date (73) 8p.
Bowen, Peter
Genetic Counseling in Mental Retardation.
EDRS mf,hc

Descriptors: exceptional child services; mental retardation; genetics; counseling; mentally handicapped; mongolism

The task of the genetic counselor who identifies genetic causes of mental retardation and assists families to understand risk of recurrence is described. Considered are chromosomal genetic disorders such as Down's syndrome, inherited disorders such as Tay-Sachs disease, identification by testing the amniotic fluid cells (amniocentesis) in time for abortion, problems of identifying biochemical abnormalities, and kinds of decisions parents make with support from the genetic counselor. (MC)

ABSTRACT 2638

EC 05 2638 ED N.A.
Publ. Date Sep 73 7p.
Miranda, Simon B.; Fantz, Robert L.
Visual Preferences of Down's Syndrome and Normal Infants.
EDRS not available
Child Development; V44 N3 P555-61 Sep 1973

Descriptors: exceptional child research; mentally handicapped; mongolism; infancy; visual stimuli; stimulus behavior

The differential visual responses of 20 Down's Syndrome (DS) and 20 normal infants, 8 months of age, to 13 pairs of visual targets were compared. Although the DS Ss looked longer at the stimuli than the normal Ss, they showed a response differential in only three stimulus pairs compared with 11 stimulus pairs for the normals. Six of the stimulus pairs elicited significant DS-normal differences (differences related to type of stimulus variation). Form of contour, the variation least attributable to inferior vision in DS infants, elicited the most marked group difference. The results suggested the value of this approach for studying early perceptual-cognitive development in defective infants and pointed to an early relationship between visual-attentional responses and intellectual potential. (Author/MC)

ABSTRACT 256

EC 06 0256 ED N.A.
Publ. Date Jun 73 9p.
Loesch, Danuta
Minutiae and Clinical Genetics.
EDRS not available
Journal of Mental Deficiency Research; V17,2 P97-105 Jun 1973

Descriptors: exceptional child research; mentally handicapped; mongolism; medical evaluation; genetics

Minutiae, ends and junctions of finger tip or palm lines, were analyzed in a sample of 115 normal adult individuals, 40 cases of Down's syndrome, and 130 normal children (aged 6 to 14 years). Minutia count was expressed by the index of the intensity of minutiae pattern per number of ridges, I, and the index of relative proportion of junctions, J, between the normal and mongol groups were found in the value of the I and J indices per area, the presence or absence of pattern in an area, and the number of junctions. The proportion of ends found to be a function of age. (DB)

ABSTRACT 276

EC 06 0276 ED N.A.
Publ. Date Oct 73
Melyn, Michelle A.; White, Delilah T.
Mental and Developmental Milestones of Noninstitutionalized Down's Syndrome Children.
EDRS not available
Pediatrics; V52 N4 P542 5 Oct 1973

Descriptors: exceptional child research; mentally handicapped; mongolism; child development; maturation; motor development; language development; intellectual development; evaluation criteria

Developmental data on 612 home reared, Down's Syndrome children, from birth through 16 years of age, were collected over 20 years from an outpatient clinic for mentally retarded children and were statistically analyzed to ascertain normative times of motor, language, and intellectual developmental behaviors. The findings indicated that the range in development for a single behavior such as sitting up unsupported is much greater for the Down's Syndrome child than for a normal child, and that IQ scores tend to decrease with age in Down's Syndrome children. Developmental norms for 14 behaviors such as rolling over and standing up were ascertained. (Author/MC)

ABSTRACT 658

EC 06 0658 ED N.A.
Publ. Date Sep 73 6p.
Jeffree, Dorothy and Others
Facilitating Two-Word Utterances in Two Down's Syndrome Boys.
American Journal of Mental Deficiency; V78 N2 P117-22 Sep 1973

Descriptors: exceptional child research; mongolism; language instruction; mentally handicapped; early childhood; males; sentence structure

Two young Down's syndrome boys both 4-years-old and equated developmentally, were selected as subjects in a design involving both between and within-subject control procedures with the aim of demonstrating that early two-word utterances of the pivot-open type could be taught to mentally retarded children. After both the children had been taught the appropriate 10 nouns and one participle, the experimental child was trained to structure pivot-open utterances with five of the original 10 nouns plus the pivot 'gone' in a play situation.

The control child's treatment paralleled that of the experimental child except that no pivot-open models were provided. When criterion level was reached for the experimental child, using the first five nouns, he was exposed to the second five nouns. Generalization of the learned structure to these five nouns then occurred. The control child was then switched to the experimental condition, whereupon he learned to imitate, produce, and generalize the pivot-open construction. (Author)

ABSTRACT 660

EC 06 0660 ED N.A.
Publ. Date Sep 73 6p.
Gibson, David
Karyotype Variation and Behavior in Down's Syndrome: Methodological Review.
American Journal of Mental Deficiency; V78 N2 P128-33 Sep 1973

Descriptors: exceptional child research; mongolism; genetics; behavior patterns; research methodology; mentally handicapped

Recent studies of possible relationships between the subclass of abnormal karyotype and behavioral outcomes for Down's syndrome were evaluated. Major limitations to interpretation relate to the uncontrolled influence of maturation, questionable behavioral assessment, differential mortality effects, selection bias across karyotype, and unbalanced proliferation rates between normal and abnormal cells for the syndrome. A biological-behavioral heterogeneity hypothesis was offered to account for the few differences surviving methodological scrutiny. (Author)

ABSTRACT 1534

EC 06 1534 ED N.A.
Publ. Date Spr 74 3p.
Mapret, Louis
Down's Syndrome and Amniocentesis.
Special Children; V1 N1 P38-40 Spr 1974

Descriptors: exceptional child education; mentally handicapped; mongolism; multiply handicapped; physical characteristics; incidence; genetics; medical evaluation; Amniocentesis

Discussed are characteristics, incidence, and prenatal diagnosis of Down's Syndrome or mongolism. Listed are common features such as slanting eyes and stubby hands, and common multiple handicaps such as strabismus, heart defects, and spinal disorders. Incidence figures for women at various ages and genetic conditions are given to range from one out of four (if parent carries a chromosomal abnormality to 1 in 600 (the rate in the general population). Amniocentesis is explained to be a procedure which can detect mongolism after the third month of pregnancy. (DB)

ABSTRACT 1538

EC 06 1538 ED N.A.
Publ. Date Spr 74 6p.

Sirsensen, Richard J.
Guilt and the Label: Or What Shall We Call Our Retarded Child?
Special Children; N1 V1 P57-62 Spr 1974

Descriptors: exceptional child education; mentally handicapped; mongolism; parent attitudes; ability identification; classification; adjustment problems; Labeling

The label a family uses in referring to a retarded child can affect the development and adjustment of the child. Negative labels limit the interactions available to an individual. Families which use the term 'retardate' have been found to often withdraw from the main stream of society. Labels must never be used to eliminate a child from treatment rather than leading to treatment. Down's Syndrome or mongolism is a well known medical syndrome caused by a chromosomal defect. Parents often pass through five psychological stages before fully accepting the retarded child: recognition of the existence of a problem, recognition of the serious nature of the problem, diagnosis to ascertain the cause of the problem, search for a cure, and acceptance. Some parents achieve acceptance more readily if terms such as 'exceptional' and 'brain damaged' are used. (DB)

ABSTRACT 1547

EC 06 1547 ED N.A.
Publ. Date Apr 74 3p.
Gayton, William F.; Walker, Linda
Down's Syndrome: Informing the Parents. A Study of Parents' Preferences.
American Journal of Diseases of Children; V127 N4 P510-2 Apr 1974

Descriptors: exceptional child research; mentally handicapped; mongolism; infancy; surveys; parent attitudes; physicians; identification; emotional adjustment; parent counseling; Down's Syndrome

The study evaluated the experiences of 85 sets of parents when they were told of the Down's Syndrome condition of their child, and their preferences regarding the informing procedure. The survey revealed that the majority of parents preferred to be told as early as possible, with both parents present. Also, the parents reported that they found it helpful when the physician provided them with reading materials, recommended they get in touch with other parents with a similar problem, encouraged them to return for support and advice, and referred them to other sources for help. (Author/MC)

ABSTRACT 1567

EC 06 1567 ED N.A.
Publ. Date Mar/Apr 7
Golden, Deborah A.; Davis, Jessica G.
Counseling Parents After the Birth of an Infant with Down's Syndrome.
Children Today; V3 N2 P7-11, 36 Mar/Apr 1974

Descriptors: exceptional child services; mentally handicapped; mongolism; infancy; parent role; physicians; child rearing; placement; counseling; personal adjustment; Downs Syndrome

Interviews in a genetic counseling program have indicated that the birth of a Down's syndrome baby (one in every 600 babies born in the U.S.) represents a crisis for both physicians and parents which can be lessened if physicians are prepared to help parents face issues of management. Current professional responses include giving information soon after birth and frequently recommending immediate institutionalization. Some parents who have either followed their physicians' advice and later brought their children home or have disregarded the advice have reported good progress in their children and their own subsequent negative attitudes toward professionals. Parents appreciate counseling approaches of physicians such as recognizing individual feelings, sharing information in the presence of both parents present, encouraging questions, knowing availability and costs of institutional care, planning for the child's needs. Most Down's Syndrome infants and children can be reared in a home environment but need a network of community services to provide programs and counseling for all age levels. (MC)

ABSTRACT 1622

EC 06 1622 ED N.A.
Publ. Date Mar 74 7p.
Zekulin, Xenia Y. and Others
Auditory-Motor Channeling in Down's Syndrome Subjects.
American Journal of Mental Deficiency; V78 N5 P571-7 Mar 1974

Descriptors: mongolism; auditory perception; perceptual motor learning; exceptional child research; mentally handicapped; learning processes; Down's Syndrome

An auditory-motor channeling deficit hypothesis for Down's syndrome (mongolism) incorporating modality, distraction, and patterning variables and maintaining uniformity of motor output was tested with 10 nonretarded children, 10 Down's syndrome children, and 10 retarded but non-Down's syndrome children (mean age of both retarded groups was 7 1/2 years). While the overall findings did not support the hypothesis, there was evidence that auditory-motor channeling difficulty does occur more frequently for Down's syndrome Ss than for other retarded Ss under conditions which possibly relate to difference of inhibitory facility. (Author/DB)

ABSTRACT 1641

EC 06 1641 ED N.A.
Publ. Date Sep-Dec 7 9p.
Stoller, A. and Others
Cancer, Leukaemia, Congenital Abnormalities and Down's Syndrome in Victoria, Australia.
Journal of Mental Deficiency Research; V17 Parts 3&4 P263-71 Sep-Dec 1973

Descriptors: mongolism; incidence; anomalies; exceptional child research; mentally handicapped; diseases; family characteristics; genetics; Cancer; Down's Syndrome

Two surveys investigated the possible association between Down's syndrome and congenital abnormalities and between Down's syndrome and malignancy. Results of a questionnaire showed no greater an incidence of cancer, leukemia, or congenital malformations in the families of Down's Ss. A search of the Victoria (Australia) cancer register also failed to show a greater number of cancer cases among mothers of Down's syndrome children. (DB)

ABSTRACT 2304

EC 06 2304 ED N.A.
Publ. Date Mar 74 4p.
Gillham, Bill
Developing a Language Program.
Special Education: Forward Trends; V1 N1 P17-20 Mar 1974

Descriptors: exceptional child education; mongolism; language instruction; comprehension; program descriptions; mentally handicapped; childhood

A language program emphasizing comprehension has been developed and used with four mentally handicapped children (6- to 8-year-old) with Down's Syndrome. The program emphasizes individual words which are classified as concepts and categories, noun-labels, or action verbs. Toys and other materials are used to support the meaning of the language content, as well as to help motivation and attention. Words are chosen for inclusion in the program because children use them or are likely to use them. Although individual words are the focus of the program, a frame of reference is provided for the concepts. Teaching sessions are characterized by the development of a pleasurable relationship to encourage communication and by continuous exploratory assessment by teaching. The program emphasizes language comprehension since most theories and empirical studies of language development see comprehension as necessarily preceding speech. (GW)

ABSTRACT 2714

EC 06 2714 ED N.A.
Publ. Date 73 16p.
Antenatal Diagnosis and Down's Syndrome.
National Inst. of Child Health and Human Development (NIH), Bethesda, Md.
EDRS MF, HC
Report No. DHEW (NIH) 74-538
Descr. Note: For related document addressed to women over 35 years old, see EC 06 2715
National Institute of Child Health and Human Development, Landow Building Room C-708, 7910 Woodmont Avenue, Bethesda, Maryland 20014 (single copies)

Descriptors: exceptional child education; mongolism; genetics; parent counseling; diagnostic tests; mentally handicapped; etiology

The pamphlet, written for physicians and other health professionals who counsel parents, explains five factors which put women at high risk of giving birth to a child with Down's Syndrome and three antenatal diagnostic techniques. Five factors identified as indicating high risk are advanced maternal age (over 40 years old), a previous child with Down's Syndrome,

chromosomal translocation in the mother or father, parental mosaicism, and Down's Syndrome in the mother. Briefly examined are the uses of amniocentesis, amniography and ultrasonography as antenatal diagnostic techniques, the risks of amniocentesis, the benefits of proper diagnosis, and what parents can expect if they have a child with Down's Syndrome. (GW)

ABSTRACT 2715

EC 06 2715 ED 094 546
Publ. Date 73 17p.
Facts About Mongolism for Women Over 35.
National Inst. of Child Health and Human Development (NIH), Bethesda, Md.
EDRS HF, HC
Report No. DHEW (NIH) 74-536
Descr. Note: For a related document addressed to health professionals who counsel parents, see EC 06 271.
National Institute of Child Health and Human Development, Landow Building Room C-708, 7910 Woodmont Ave., Bethesda, Md. (single copies); Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (stock #1746-00020, $.40)

Descriptors: exceptional child education mongolism; mothers; age differences; etiology; mentally handicapped; genetics; parent counseling

The pamphlet uses diagrams and a question and answer format to explain briefly the causes and symptoms of Down's Syndrome and the risks of bearing children with Down's Syndrome for women over 35 years old. Discussed are such topics as typical IQ range for children with Down's Syndrome, the three genetic types of Down's Syndrome, and the function of a genetic counselor. (GW)

ABSTRACT 2811

EC 06 2811 ED N.A.
Publ. Date Mar 74 3p.
Gunzburg, H. C.; Sinson, Janice C.
Social Backwardness.
Parents Voice; V24 N2 P4-6 Mar 74

Descriptors: exceptional child education; mentally handicapped; mongolism; performance tests; standardized tests; norm references tests; achievement; educational diagnosis; student evaluation; social development

The importance of determining whether a mentally handicapped child is functioning at, above, or below the level of other children of similar age and mental handicap is explained. Research showing that Down's Syndrome children tend to perform at a higher level than other mentally handicapped children is reviewed. Information is provided on an assessment inventory which indicates a mongol child's successes and gaps in knowledge and an evaluation index which shows average achievement level of a particular age group. Use of these two instruments to obtain comparison of achievements of a mentally handicapped child with other mentally handicapped children, thus identifying areas of underachievement is discussed. (MYS)

ABSTRACT 44

EC 07 0044 ED N.A.
Publ. Date Sum 74 11p.
Menolascino, Frank J.
Changing Developmental Perspectives in Down's Syndrome.
Child Psychiatry and Human Development; V4 N4 P205-15 Sum 74

Descriptors: exceptional child research; mentally handicapped; mongolism; adults; institutionalized (persons) self care skills; clothing; eating habits; hygiene; daily living skills; evaluation;

Ambulation, feeding, dressing, toilet training, and grooming skills were assessed in 72 adults (25- to 45-years-old) with Down's Syndrome in a publicly supported residential facility. Data showed that over 79% of the sample were rated as able to feed themselves completely and neatly and 64% as able to undress themselves well and to require only occasional or minor help in dressing; and that Ss' levels of proficiency in grooming varied from 69% on washing and drying hands to 5% on shaving. Findings indicated that more than 50% of the Ss were able to master basic self help skills despite early institutionalization. (GW)

ABSTRACT 118

EC 07 0118 ED N.A.
Publ. Date Jul 74 7p.
Bruun, Nissan and Others
Early Maternal Linguistic Environment of Normal and Down's Syndrome Language-Learning Children.
American Journal of Mental Deficiency; V79 N1 P52-8 Jul 1974

Descriptors: mongolism; mothers; language development; environmental influences; expectation; exceptional child research; mentally handicapped;

The linguistic data that Down's syndrome and normal language-learning children are exposed to in their maternal environment were investigated with five mothers of normal 2-year-olds and six mothers of 2-year-old Down's Syndrome children. It was found that the Down's syndrome children received a different linguistic input than the normal children in a play situation and in two table-setting situations. The possibility of a relationship between the Down's syndrome children's different early maternal linguistic environment and later characteristics of their deviant/delayed language was considered. Also discussed were various aspects of language development in general. (Author)

ABSTRACT 315

EC 07 0315 ED N.A.
Publ. Date Fal 74 4p.
Ogletree, Earl J.
The Universal Child: The Mongol and His Education.
Special Children; V1 N2 P25-8 Fal74

Descriptors: exceptional child education; mentally handicapped; mongolism; educational needs; genetics; personality development;

The genetic characteristics of children with Down's Syndrome are identified, and generalizations are offered regarding the personality characteristics and educational needs of such children. For example, it is suggested that such children rarely develop an interest in sexual matters, that a lack of differentiation and mature development make them unintellectual but kindly and loving towards others, and that an educational program stressing such features as word pictures, fables, and artistic and motor activities is most appropriate for children with Down's Syndrome. (GW)

ABSTRACT 321

EC 07 0321 ED N.A.
Publ. Date Fal 74 5p.
Share, Jack B.; French, Ronald W.
Guidelines of Early Motor Development in Down's Syndrome Children for Parents and Teachers.
Special Children; V1 N2 P61-5 Fal74
Descriptors: exceptional child education research; mentally handicapped; mongolism; child development; maturation; infancy; early childhood; definitions; age differences;

On the basis of studies in New Zealand and at the Los Angeles Children's Hospital, Child Development Center, data are provided for the ages at which Down's Syndrome children first achieved or acquired 16 developmental landmark behaviors. The 16 landmarks, each of which is defined briefly, include sitting unsupported for 1 minute erect; creeping; and drawing or imitating a circle. (GW)

ABSTRACT 654

EC 07 0654 ED N.A.
Publ. Date Nov 74 21p.
MacDonald, James D. and Others
An Experimental Parent-Assisted Treatment Program for Preschool Language-Delayed Children.
Journal of Speech and Hearing Disorders; V39 N4 P395-415 Nov 1974

Descriptors: exceptional child research; mentally handicapped; mongolism; language development; early childhood; parent role; training techniques; expressive language; program evaluation;

Six preschool children with Down's syndrome were Ss in an experimental program using parents as the primary language trainers. Three children served as experimental Ss and three as controls. The program applied the Environmental Language Intervention Strategy to effect a generalized functional language in children who primarily were capable of only single-word utterances. The major objective was to increase utterance length and grammatical complexity. The two essential procedures were to train immediate generalization of language changes from imitation to parallel conversation and play activities, and to educate parents as language trainers to effect immediate transfer of training. The 5-month program ran in two stages, 2 months with professionals and mothers as language trainers and 3 months in the home with parents as the sole language trainers. Results from the 2 month stage indicated marked increases in utterance length and grammatical complexity in imitation and

conversation for all experimental Ss but negligible changes for the controls. Follow-up assessment indicated continued language increments for the experimental Ss over 3 months of home programming with parents as the sole language trainers. The experimental language growth in the mean length of utterance over 3 months of home programming for the retarded children was comparable to growth for normally developing children. The program was replicated successfully with the original control Ss. (Author)

ABSTRACT 1213

EC 07 1213 ED N.A.
Publ. Date Dec 74 3p.
Evans, David
Language Development in Mongols.
Special Education Forward Trends; V1 N4 F23-5 Dec 1974

Descriptors: exceptional child research; mentally handicapped; mongolism; language development; age differences; sex differences; language patterns;

Assessed were the language abilities of 101 Down's Syndrome persons 8-to 31-years old. Analysis of scores on the Illinois Test of Psycholinguistic Abilities and the Draw-a-Man intelligence scale provided the following information: the discrepancy between manual and verbal expression scores was less than had been cited in research by S. Kirk and A. Luria, the boys had significantly less fluent speech than the girls, and speech structure scores continued to improve with age. The findings, coupled with a high incidence of hearing loss detected in the Ss, emphasized the need for continued language instruction after the Down's Syndrome individual leaves school. (CL)

ABSTRACT 1472

EC 07 1472 ED 102 784
Publ. Date 74 8p.
Angney, Alice
Establishing Walking Responses in a Twenty-Month Old Child by a Parent Trained in Behavioral Analysis.
Washington Central Supervisory Union, Montpelier, Vt.
EDRS mf; hc

Descriptors: mongolism; infancy; behavior change; parent role; motor development; exceptional child research; mentally handicapped; operant conditioning; travel training; walking;

Walking behavior was established in a 20-month-old Down's Syndrome girl by a parent trained in behavior analysis. During a series of 7-minute sessions, the child was given edible reinforcement for taking unsupported steps between two chairs which were gradually moved from 18 to 70 inches apart. In three final generalization sessions, the chairs were removed and the child was reinforced for walking unsupported from one parent to the other. Walking was firmly established with a total expenditure of 3 hours, 9 minutes time. Benefits of the procedure included the involvement of a minimum of time and preparation and the use of family members as teachers. (LS)

ABSTRACT 2445

EC 07 2445 ED 107003
Publ. Date Aug 74 58p.
Rynders, John E.; And Others
The Severe Nature of Verbal Learning Deficits in Preschool Down's Syndrome (Mongoloid) Children. Research Report No. 69.
Minnesota Univ., Minneapolis Research, Development, And Demonstration Center in Education of Handicapped Children.
Bureau of Education for the Handicapped (DHEW/OE), Washington, D. C.
EDRS mf;hc
OEG-09-332189-4533 (032)

Descriptors: mongolism; early childhood; verbal learning; task analysis; learning characteristics; exceptional child research; mentally handicapped; self care skills;

Twenty 3-year-old, home reared Down's Syndrome children and eight 3-year-old normal children were studied to examine the verbal learning characteristics of Down's Syndrome children in typical preschool learning tasks. Prior to the study, research on characteristics of verbal learning deficits in retarded individuals and on verbal skill training was reviewed. A hierarchy of teaching strategies (verbal prompt, verbal instruction, imitation plus verbal instruction, and manual guidance plus verbal instruction) was used in teaching 16 self-help and preacademic tasks. Approximately 40 - 50% of the tasks were not solved by Down's Syndrome Ss with verbal prompting plus verbal instruction alone. Only 14% of the tasks were not solved by normal Ss at the same levels of instruction. Despite additional trials, which were enriched with verbal instruction and made more direct through the use of imitation and manual guidance strategies, Down's Syndrome Ss failed to acquire task solution more than 25% of the time. Verbal learning deficits seemed to lie largely in the auditory or integration phases of the task and only minimally in the motor output phase. (GW)

ABSTRACT 2699

EC 07 2699 ED N. A.
Publ. Date 75 169p.
Carr, Janet
Young Children with Down's Syndrome: Their Development, Upbringing, and Effect on Their Families.
Butterworth and Company, 88 Kingsway, London, England WC2B 6AB

Descriptors: exceptional child research; mentally handicapped; mongolism; child development; family attitudes; family role; cognitive development; motor development; maturation; family problems; adjustment problems;

In a longitudinal study, the developmental patterns and family implications of 45 Down's Syndrome and 45 control Ss were evaluated from age 6 weeks to 4 years. Ss were given the Bayley Infant Scales of Mental and Motor Development 7 times and the mothers were interviewed when the Ss were 15-months and 4- years-old. Analysis of developmental scores indicated such findings as lower scores for the Down's Syndrome than control Ss at 6 weeks, dropping sharply to 10 months and more gradually thereafter; and higher scores on home reared than institutionalized Down's Syndrome Ss. Family survey data indicated that Down's Syndrome Ss actually presented fewer problems in sleeping crying, and tantrum behavior than did control Ss; and that there was little difference in such areas as child aggressiveness and manageability. Major problems cited by mothers of the Down's Syndrome children included feeding, dressing and health difficulties. (The parent interview schedules are appended). (CL)

ABSTRACT 3412

EC 07 3412 ED 111120
Publ. Date Apr 74 61p.
Schramm, Barbara J.
Case Studies of Two Down's Syndrome Children Functioning in a Montessori Environment: Research Project.
University of Dayton, Ohio. School of Education.
EDRS mf;hc

Descriptors: mongolism; case studies; educational methods; program effectiveness; regular class placement; exceptional child education; mentally handicapped; preschool education; teaching methods; child development; females; Montessori Method; Piaget (Jean);

Presented are case histories of 2 Down's syndrome (mosaic form) 6 and 10-year-old girls who attended regular Montessori classes. General characteristics of Down's syndrome and other retarded children are reviewed and compared with the 2 girls' growth and development (according to J. Piaget's proposed stages). The Montessori emphasis on sensorial activities and on individual freedom to choose tasks is seen to enhance the retarded child's development. Analyzed are the girls' progress in such skill areas as language, reading and math. The children are said to be functioning in Piaget's pre-conceptual and intuitive stages. Emphasized is the need for an approach which includes raised social and academic expectations along with instruction in independence and self direction. An appendix lists suggested Montessori materials and activities for handicapped children. (CL)

ABSTRACT 3492

EC 07 3492 ED N. A.
Publ. Date 75 242p.
Koch, Richard, Ed.; De La Cruz, Felix F., Ed.
Down's Syndrome (Mongolism): Research, Prevention, and Management.
Brunner/Mazel, Inc., 64 University Place, New York, NY 10003 ($10.00)

Descriptors: exceptional child research; exceptional child education; mentally handicapped; mongolism; conference reports; etiology; genetics; prevention; medical treatment; biochemistry; medical research;

Presented are the proceedings from a 1973 conference on research, prevention,

and management of Down's syndrome. The text contains the following 19 papers in addition to an introduction by J. Rockefeller: 'Etiology of Down's Syndrome' (J. Warkany); 'Chromosomal Abnormalities' (G. Donnell et al); 'Facial and Oral Manifestations of Down's Syndrome' (R. Sanger); 'Prenatal Detection of Down's Syndrome: Technical and Ethical Considerations' (M. Naback et al); 'Family Planning as a Method of Prevention' (Z. Stein); 'Developmental Progress in Down's Syndrome' (J. Share); 'Mental Development in Mosaic Down's Syndrome as Compared with Trisomy 21' (K. Fishler); 'Present Approaches to Therapy in Down's Syndrome' (G. Smith); 'The Use of 5-Hydroxytryptophan in Patients with Down's Syndrome' (M. Coleman); 'The Use of 5-Hydroxytryptophan in the Treatment of Down's Syndrome' (L. Weise et al); 'Decreased ATPase, Increased Na plus and Decreased K plus in Down's Syndrome Platelets' (E. McCoy et al); 'Theoretical Concepts of Early Intervention' (S. Pueschel); 'Principles and Methods of Early Intervention' (E. Zausmer); 'Infant Stimulation' (K. Barnard); 'Language Intervention-Changing the Language Environment of the Retarded Child' (S. Seitz); 'Community Attitudes and Down's Syndrome' (R. Edgerton); 'Preparation for Employment' (F. Swanson); 'Mobility Training for the Retarded' (P. Del Monico); and 'Sexuality in the Mentally Retarded' (J. Ell). Appended is 'The Role of the National Association for Retarded Citizens in Developing Research in Mental Retardation' (F. Menolascino et al). (CL)

ABSTRACT 3577

EC 07 3577 ED N. A.
Publ. Date Sep 75 5p.
Gliddon, Jack B.; And Others

Effect of Preconditioning Visual Stimulus Duration on Visual-Evoked Responses to a Subsequent Test Flash in Down's Syndrome and Nonretarded Individuals.

American Journal of Mental Deficiency; V80 N2 P186-190

Descriptors: mongolism; visual stimuli; time factors (learning); cognitive processes; exceptional child research; mentally handicapped; adults;

Visual-evoked responses to a visual test flash preceded by three different durations of a visual conditioning flash having the same intensity and form were recorded from eight Down's chronological age. Both groups showed a significant decrease in visual-evoked response perimeters to the test flash as the duration of the visual condition flash increased from 1 to 100 msec. For the 1000-msec condition, perimeters of Down's syndrome Ss showed a significant increase, and this was significantly greater than the nonretarded group. These results suggested that Down's syndrome individuals have deficits in their neural processing of sensory information. (Author)

ABSTRACT 3744

EC 07 3744 ED 112557
Publ. Date Apr 75 19p.
Cicchetti, Dante; Sroufe, L. Alan

The Relationship Between Affective and Cognitive Development in Down's Syndrome Infants.

University of Minnesota, Minneapolis. Institute of Child Development.
EDRS mf;hc
Paper Presented at the Biennial Meetings of the Society for Research in Child Development (Denver, Colorado, April 1975)

Descriptors: mongolism; infancy; cognitive development; affective behavior; exceptional child research; mentally handicapped; emotional development;

Examined was the association between affective and cognitive development in 14 Down's syndrome infants (4 - 8 months old). Mothers administered a series of 30 laughter items each month, and experimenters gave the Uzgiris-Hunt scales of cognitive development at 13 and 16 months, and the Bayley Scales and Infant Behavior Record at 16 months. Available data indicated that Ss lagged well behind normal infants in onset of laughter and smiling although they followed the order of laughter items category by category (laughing first to auditory and tactile items and then to more cognitively complicated social and visual items). Results also demonstrated a clear relationship between cognitive and affective development, especially with regard to stages of object permanence and operational causality. (CL)

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Revised May 1976

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